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**European Commission**

# **EUROPEAN ECONOMY**

**Reports and studies**

**Directorate-General for Economic and Financial Affairs**

**1995**

**Number 1**





# **The economic and financial situation in the Netherlands**

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This study was prepared under the responsibility of the Directorate-General for Economic and Financial Affairs, and was discussed by the Economic Policy Committee in September 1995.

## Abbreviations and symbols used

### *Member States*

B	Belgium
DK	Denmark
D	Germany
WD	West Germany
GR	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	The Netherlands
P	Portugal
UK	United Kingdom
EUR 9	European Community excluding Greece, Spain and Portugal
EUR 10	European Community excluding Spain and Portugal
EUR 12–	European Community, 12 Member States including West Germany
EUR 12+	European Community, 12 Member States including Germany
EUR 15	European Community, 15 Member States
EUR 15–	European Community, 15 Member States, including West Germany

### *Currencies*

ECU	European currency unit
BFR	Belgian franc
DKR	Danish crown (krone)
DM	German mark (Deutschmark)
DR	Greek drachma
ESC	Portuguese escudo
FF	French franc
HFL	Dutch guilder
IRL	Irish pound (punt)
LFR	Luxembourg franc
LIT	Italian lira
PTA	Spanish peseta
UKL	Pound sterling
USD	US dollar
SFR	Swiss franc
YEN	Japanese yen
CAD	Canadian dollar
OS	Austrian schilling
R	Russian rouble

### *Other abbreviations*

ACP	African, Caribbean and Pacific countries having signed the Lomé Convention
ECSC	European Coal and Steel Community
EDF	European Development Fund
EIB	European Investment Bank
EMCF	European Monetary Cooperation Fund
EMS	European Monetary System
ERDF	European Regional Development Fund
Euratom	European Atomic Energy Community
Eurostat	Statistical Office of the European Communities
GDP (GNP)	Gross domestic (national) product
GFCF	Gross fixed capital formation
LDCs	Less-developed countries
mio	Million
mrd	1 000 million
NCI	New Community Instrument
OCTs	Overseas countries and territories
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PPS	Purchasing power standard
SMEs	Small and medium-sized enterprises
toe	Tonne of oil equivalent
:	Not available

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## Introduction<sup>1</sup>

The Dutch overall economic performance in recent years has been satisfactory compared to most other Member States. Economic growth was faster than the European average, mainly because of the good export performance, which was related to the composition of the Dutch export package and underpinned by a moderate wage and cost evolution. The exchange-rate link between the Dutch guilder and the German mark withstood the 1992 and 1993 ERM crises well, and inflation and the interest rate level remained among the lowest in Europe and continued to comply with their respective EMU requirements.

Despite these favourable economic developments, the public finance situation and the labour market still require attention. The low participation rate in the labour market and the public deficit and debt levels were already the central themes of the Commission's previous country study on the Netherlands (1992). Although Dutch economic policy in the three years since the publication of the country study was clearly aimed at promoting employment and reducing the public deficit, a significant improvement in the situation proved to be difficult, mainly because of the economic recession in Europe. Although employment expanded by 3% in the period 1992-95, unemployment increased from 5,6% to around 7,0% of the active labour force. Despite its reduction, the deficit ratio remained above the 3% of GDP EMU benchmark, and the debt ratio, although showing some modest decline, continued to hover around 80% of GDP. Consequently, the diagnosis of the problems of the Dutch economy — as made in the previous country study — remains roughly valid and will not be repeated in detail in the present country study.

Instead, the study concentrates on the policy answers to the predominant problem areas: the necessity to curb the public finance situation to comply with the EMU convergence criteria, the need to create additional employment to fight the high inactivity rate in the labour market, and the insufficient degree of competitive behaviour in the product markets.

The previous government (1989-94) continued its deficit reduction policy, as presented in the first convergence programme, successfully in 1992 and 1993, despite the economic downturn. However, the economic policy stance changed gradually in 1994, and the focus shifted partly from deficit reduction to employment creation. Hence, the government decided to loosen the fiscal consolidation path to promote employment, by lowering the high social security

contributions. As a consequence, the expected outcome of the first convergence programme for the general government deficit was not realized in 1994; the deficit remained higher than 3% of GDP. In the new convergence programme, which covers the period 1995-98, employment creation is also a policy objective, next to improving the public finance situation. Consequently, important cuts in social security contributions and some tax reductions are scheduled for 1995 and 1996, financed by expenditure cuts in the social security sector. The even-handed approach of simultaneous tax and deficit reductions is fully compatible with the pursuit of the fulfilment of the EMU deficit criterion in 1996. However, the exact evolution of the government deficit and debt ratios will depend on whether there is more economic growth than assumed in the cautious growth scenario, on which the new convergence programme is based. The debt ratio will only diminish sufficiently to comply with the EMU debt criterion, if the additional budgetary room resulting from higher than expected economic growth is used for a significant part to reduce the deficit. A reduction of the debt ratio is also essential to ensure the ability to cover for future pension obligations.

The use of fiscal policy to promote employment is an important part of the labour market policy of the Dutch Government. However, it is only an element in the overall policy that tries to find an equilibrium between measures to promote labour demand and labour supply and between general measures and specific measures geared towards the lower end of the labour market. Reforms of the elaborate social security system constitute also a substantial component of labour market policy. Making the social security system less costly enables a reduction in the social security contributions, which should increase labour demand; increasing the gap between social security benefits and the lowest wage levels should increase incentives for benefit receivers to re-enter the labour market.

Employment in the Netherlands is also often hampered by a number of regulations on 'hiring and firing' employees. The level of regulating is not only high in the labour market, but also in goods and services markets, especially in those sectors that work mainly for the domestic market. The ensuing lack of competition reduces the dynamism for the economy, which has negative consequences for the economic growth potential and limits employment possibilities. Although, in general, the macroeconomic performance of the Netherlands has been satisfactory, more attention to the microeconomic functioning of markets could have improved the image even further. However, increasing the level of competition and reducing excessive regulations is not only a possibility to promote growth and employment, it will, above all, increase the quality of products and services, by offering more choice and flexibility.

Part I of the study describes recent developments during the economic downturn and prospects for the current recovery. The

<sup>1</sup> The cut-off for this report was early July 1995.

public finance and labour market problems are also briefly presented. Part II consequently discusses the policy answers to these two main problem areas, and also describes recent changes in competition policy and initiatives to reduce the regulation of product markets. Annex 1 covers the lack of competition and the web of regulations that limit the dynamism

of the Dutch economy. Annex 2 investigates the German influence on the term structure and level of interest rates, and studies the passing trough of real shocks. Finally, Annex 3 reviews recent reforms of the financial markets, aimed at securing competitiveness against bigger and more liquid markets in other Member States.

# **Part I — Recent developments and prospects**





## Chapter 1: Macroeconomic performance and prospects

The Netherlands did not escape from the general economic downturn in the European Union in the early 1990s. Still, the recession was less severe than in most of the other Member States, and the Netherlands even recorded a small positive economic growth in 1993. Driven by external demand, economic development picked up very rapidly in 1994. With the additional support of investment, growth is expected to continue in 1995, but will probably decelerate in 1996 because of lack of consumer demand.

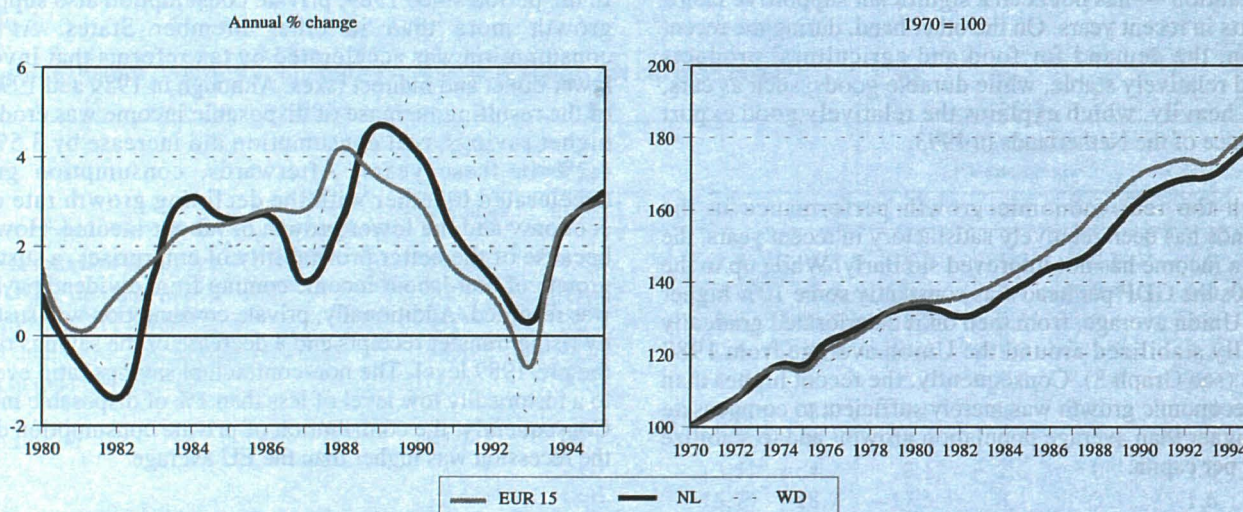
### 1.1. Mild economic downturn

Economic growth in the Netherlands has been gradually slowing down since 1989 and almost stagnated in 1993. However, because of specific circumstances, real GDP growth in the Netherlands was less affected by the recession than in

most of the other Member States. Contrary to previous periods, the Dutch economic cycle also seemed to be less connected to the German one. Before 1990, the Netherlands and West Germany had an almost parallel economic growth evolution, as is demonstrated by a correlation coefficient between the real GDP growth rates of the two countries that was as high as 94% in the period 1980-89. In 1990, economic growth was then stimulated by the unification process in West Germany, while it started decelerating already in the Netherlands. The opposite was true in the trough of the recession in 1993, when the Netherlands were able to avoid a contraction of the economy, while West Germany faced a negative growth of -1,7%.

The trade specialization pattern has been a determining factor for the relatively mild character of the recent European recession in the Netherlands. In contrast to most other Member States, the Netherlands have an export structure which is concentrated on agricultural, food and chemical products, while European competitors are specialized mainly in machines, cars and other durable goods. The Netherlands are also an important exporter of natural gas, which — because of the unfavourable

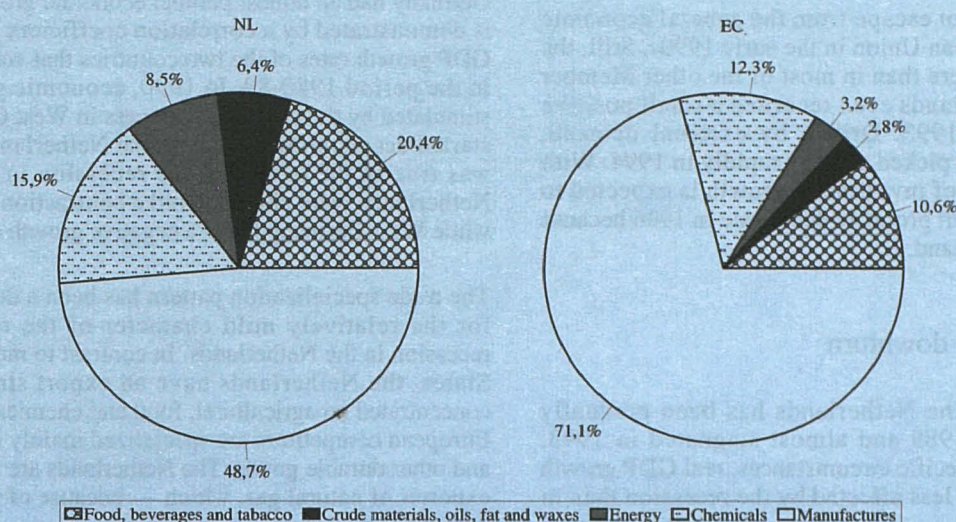
GRAPH 1: GDP at constant market prices



Source: Commission services.



GRAPH 2: Composition of export package NL and EC, 1992



Source: Eurostat.

price evolution — has not been a significant supportive factor for exports in recent years. On the other hand, during the recent recession, the demand for food and agricultural products remained relatively stable, while durable goods, such as cars, suffered heavily, which explains the relatively good export performance of the Netherlands in 1993.

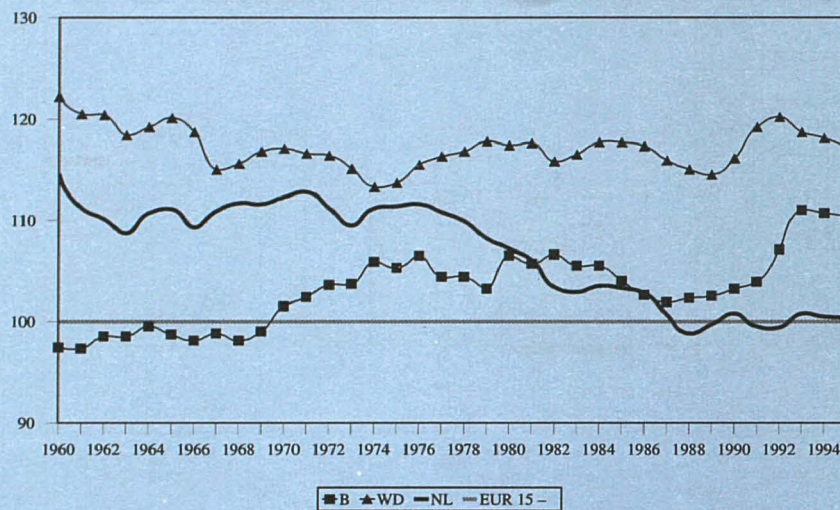
Although the real economic growth performance in the Netherlands has been relatively satisfactory in recent years, the per capita income has not improved similarly. While up to the mid-1970s the GDP per head was constantly some 10% higher than the Union average, from then on it deteriorated gradually and finally stabilized around the Union average from 1987 onwards (see Graph 3). Consequently, the recent higher than average economic growth was merely sufficient to compensate for the higher than average population growth<sup>1</sup> and to stabilize the GDP per capita.

In the period since 1989, private consumption also supported growth more than in other Member States. At first, consumption was accelerated by tax reforms that involved lower direct and indirect taxes. Although in 1989 and 1990 part of the resulting increase of disposable income was eroded by higher savings, real consumption did increase by 3.5% and 4.2% in these years. Afterwards, consumption growth decelerated together with the declining growth rate of the economy and the lower growth of labour income. However, because of the better profitability of enterprises, a sustained growth of non-labour income coming from dividend payments was recorded. Additionally, private consumption was sustained by rising transfer receipts and a decrease of the savings ratio to the pre-1989 level. The non-contractual savings ratio even fell to a historically low level of less than 1% of disposable income. Consequently, the contribution of private consumption during the recession was higher than the EU average.

Given the continued need for fiscal consolidation, public consumption has not contributed significantly to economic growth in recent years. Nevertheless, government investment remained at a relatively high level of almost 3% of GDP and thus sustained gross fixed capital formation of the total

<sup>1</sup> See also Chapter 4.



**GRAPH 3: Gross domestic product at current market prices per head of population (PPS; EUR 15 = 100)**

Source: Commission services.

**Table 1****Disposable income, consumption and saving of households (at current prices)**

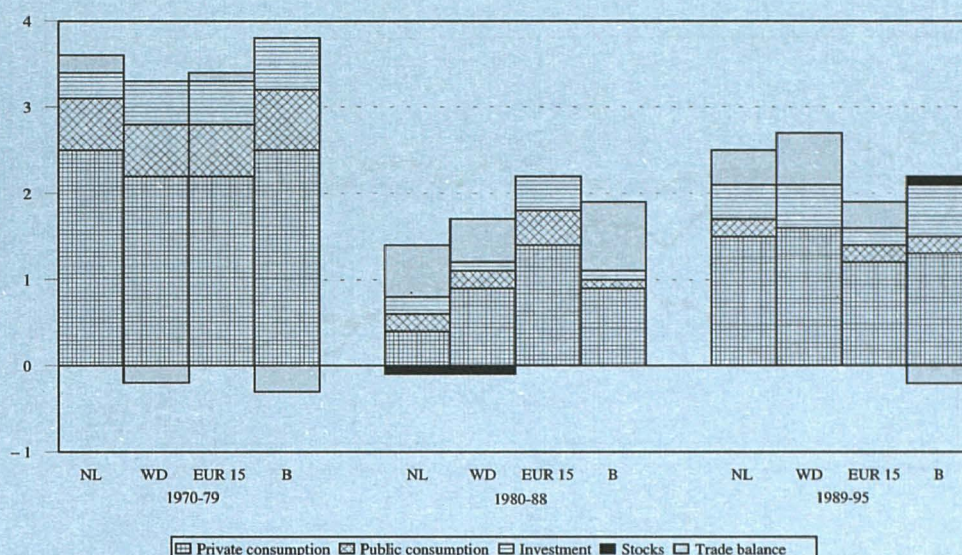
	1993: As a % of disposable income		Netherlands (% changes)						
	Netherlands	EUR 15	1989	1990	1991	1992	1993	1994 <sup>a</sup>	1995 <sup>a</sup>
Compensation of employees	77,1	73,0	2,8	5,8	6,0	5,7	2,8	1,9	3,0
Non-labour income, net	35,9	37,2	9,2	7,9	6,3	4,1	2,4	6,3	6,0
Current transfers received	41,1	31,3	2,8	10,5	5,7	6,0	3,4	2,6	0,9
Direct taxes and current transfers paid	54,1	41,4	0,6	-1,3	14,1	18,0	-1,9	2,2	0,2
Gross disposable income	100,0	100,0	6,2	8,3	2,6	6,0	2,0	3,6	4,8
real	:	:	4,9	6,0	-0,6	2,9	-0,1	1,3	2,3
Consumption	87,7	86,1	4,7	6,5	6,4	5,7	2,8	3,9	4,5
real	:	:	3,5	4,2	3,1	2,6	0,7	1,6	2,1
Saving	12,3	14,0	15,7	18,7	-17,5	8,1	-3,3	1,6	6,8
Saving ratio, as a % of gross disposable income	:	:	14,4	15,8	12,7	13,0	12,3	12,1	12,3

<sup>a</sup> Forecast

Source: Commission services.



GRAPH 4: Contributions to GDP increase



Source: Commission services.

economy, which remained higher than the Community average. However, because of the recession, private investment receded, and the total investment/GDP ratio declined markedly from 21,5% in 1989 to 19,4% in 1994, after a negative real investment growth rate of -2,2% in 1993. This investment contraction was mainly concentrated in construction by enterprises and investment in transport equipment. Investment in cars and trucks particularly suffered from an increase in the tax rate on their entry into service in January 1993, which provoked anticipatory purchases in 1992. Some other investment categories, such as investment in other equipment that was supported by some major projects in the energy sector, were less affected by the recession. From 1992 onwards, the declining trend of long-term interest rates, rising housing rents and continued reduction of the government rent subsidies sustained the construction of private dwellings. Overall, real gross fixed capital formation remained broadly stable between 1989 and 1993. However, starting from 1991, the contribution of investment to growth was higher than the average of the Union.

The balance of current transactions with the rest of the world was constantly in surplus since 1981 and ran up to 4,0% of

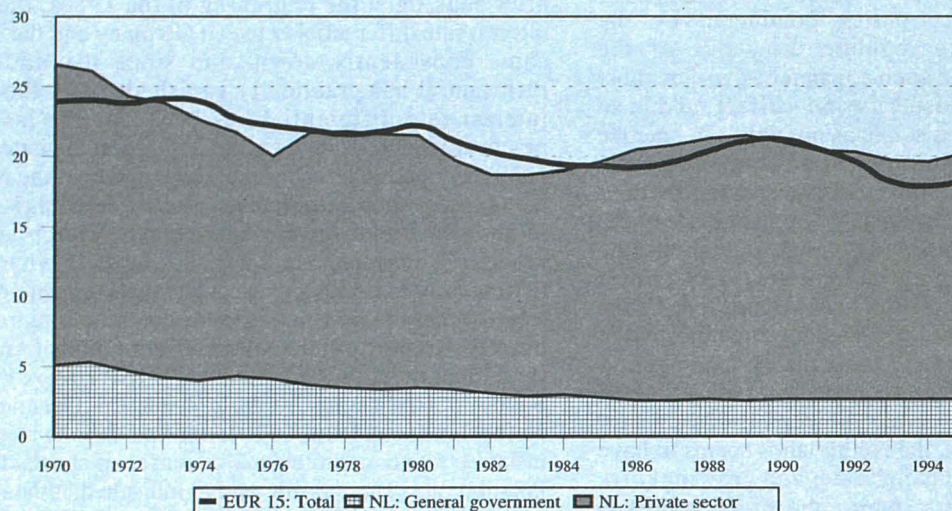
GDP in 1994. Given the importance of the external trade sector (the exports/GDP ratio was 50,6% in 1993 and the imports/GDP ratio 45,6%), this constant surplus has brought an important support to GDP growth. Compared to the average of the Union, the contribution of exports to growth was more important than the (negative) contribution of imports, since imports have been relatively high as a consequence of the comparatively high consumption growth and the large import content of Dutch exports.

Germany remained the main trading partner, representing 28,5% of exports and 22,1% of imports in 1993. Important trade relations also exist with neighbouring countries Belgium/Luxembourg, the United Kingdom and France. As a consequence, the 12 Member States of the European Union accounted for 72,5% of exports and 57,7% of total imports.

## 1.2. Faster than expected recovery

As in most of the other Member States, the 1993 economic downturn was followed by a faster than expected recovery.



**GRAPH 5: Gross fixed capital formation at current prices (as a % of GDP)**

Source: Commission services.

Economic growth accelerated from 0,4% in 1993 to 2,5% in 1994 and is expected to be 3¼ % in 1995. Exports clearly took the leading role in this recovery. Already in the second half of 1993 exports started growing at a faster pace again. While export growth was initially concentrated on the United States, the United Kingdom, Eastern Europe and the Far East, soon exports to the traditional major trading partners also strengthened. Considering that in the first phase of the recovery, demand for basic products, such as the basic chemicals that are produced massively in the Dutch chemical industry, is generally high, exports continued to grow at a favourable pace in 1994. However, as the recovery has come to a more mature phase in 1995, with high investment and more consumption of durable goods, Dutch exports may not be able to follow the average market growth rate because of the sectoral breakdowns of exports. As domestic demand remained subdued, import growth followed export growth only with a lag, creating a very large surplus on the current account.

Higher exports led to higher capacity utilization and higher profits, which were both beneficial to the evolution of corporate investment. Consequently, from the second quarter of 1994 onwards, investment also started contributing to growth again.

While construction by enterprises and investment in machinery remained hesitant, public investment, residential construction and investment in transport equipment grew fast, resulting in a growth of total gross fixed capital formation of 2,4% in 1994. It is expected that investment will contribute significantly to growth in 1995, given the marked increase of the degree of capacity utilization in 1994, some very optimistic investment surveys — which indicate that industrial investment in the manufacturing sector might rise by as much as 20% in 1995 — and major public investment projects in railways and river dikes.

Although in 1994 private consumption of durable goods (mainly cars) recovered from the artificially low level of 1993 — which was caused by the already mentioned change in taxation — total consumption growth remained limited to 1,5%. Consumer surveys indicate that while consumers are significantly more optimistic about the general economic situation, the improvement in their financial situation is less impressive. Moreover, it is likely that the savings ratio will recover somewhat from the low level it attained during the economic downturn. Therefore, it is expected that private consumption will not pick up notably before the labour market and the financial situation of the households improve.



## Chapter 2. Inflation, interest rates and exchange rate

According to section 9 of the Bank Act, 1948, the monetary objective<sup>1</sup> of the monetary policy conducted by the Nederlandsche Bank is 'to regulate the value of the Netherlands' monetary unit in such a manner as will be most conducive to the nation's prosperity and welfare, and in so doing seek to keep the value as stable as possible'. In practice this means that notably inflation must be countered. Two monetary factors are of importance in this respect: growth of the money stock and the movements in the exchange rate of the Dutch guilder.<sup>2</sup> Furthermore the exchange rate should be regulated in such a way as to protect domestic prices against foreign inflation. Clearly, then, within such a framework for the conduct of monetary policy, the ultimate, long-run objective of monetary policy is price stability, while the exchange rate is conceived as an intermediate target of monetary policy. In fact, even if there were conflicts<sup>3</sup> between objectives of monetary policy, domestic and external, the Netherlands seems to have given priority to a stable exchange rate, and growingly so, during the last 10-15 years, to a stable value of the guilder in terms of the German mark. The chief motivation for the 'DM-peg' is the generally good performance of the dominant German economy, especially in terms of inflation. Hence, the peg seems to be motivated in terms of policy discipline, i.e. the peg fosters control of inflation in the Netherlands.

So, in a sense, to 'judge' the performance of the Dutch monetary policy, one apparently only needs to take a look at the realized inflation rate over, say, the last 10-15 years and at the value of the guilder *vis-à-vis* the German mark over the same period of time. To this end, Graph 6 presents (quarterly) time-series of Dutch and German 'long- and short-term' inflation rates (Graphs 6a, 6b) and HFL/DM exchange rate (Graph 6c) over an extended period from the beginning of the 1970s to the end of 1994. Graphs on Dutch and German long- and short-term interest rates are (Graphs 6d and 6e, respectively) added to see the behaviour of the term structure of interest rates in these countries over the same period. The 'short-term' inflation rate in Graph 6d means 'four quarter inflation rate', i.e. change in consumer prices in any quarter from corresponding quarter a year earlier, whereas the 'long-term' inflation rate is calculated by taking a 20- (5-year) quarter moving average of the 'short-term' inflation rate.

According to the graphs, we can immediately say that, especially from the beginning of the 1980s, the convergence of the Dutch economy (to the German) in terms of nominal interest rates as well as inflation rate has gone remarkably far; after peaking at the beginning of the 1980s, the long-term interest rate differential between Germany and the Netherlands came consistently down, and since the mid-1980s the differential has practically vanished. Also, the short-term interest rate differential has been, for the last 10 years, practically non-existent, except perhaps in the latter half of the 1980s. Framed in terms of monetary policy in the Netherlands, non-existent short-term interest rate differentials is a reflection of the tight relationship between the Dutch and German monetary policies (led by the latter), whereas small, periodically non-existent long-term interest rate differentials suggest that the DM-peg is credible in the long run.<sup>4</sup> Results based on more formal econometric methods (Annex 2) also tend to support this conclusion. The (relative) purchasing power parity seems to hold between Germany and the Netherlands (as from 1979), and the shocks to the German inflation rate constitute a major source of shocks to the Dutch inflation rate. These results tend to indicate that the need for real exchange-rate adjustments in the Dutch economy *vis-à-vis* Germany are non-existent. As for the results from interest rate determination in the Netherlands, they tend to suggest that long-term HFL/DM exchange-rate expectations are stationary,<sup>5</sup> i.e. the DM-peg is 'long-term credible'.

Further results in Annex 2 also suggest that real convergence in the Dutch economy has gone so far that the nominal convergence is well sustained or supported by real convergence. It may, of course, be also the other way round, i.e. realized real convergence may actually reflect the credibility of the policy of pegging to the German mark, from which it follows that the costs of such a policy in terms of e.g. interest-rate differentials have come down considerably. The

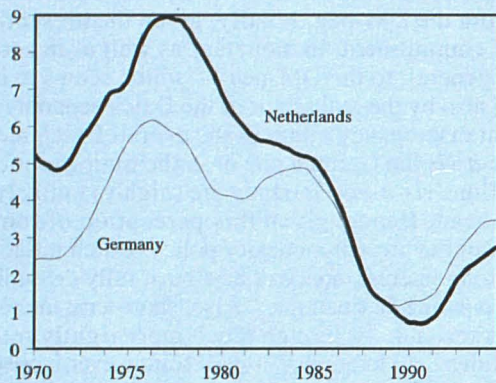
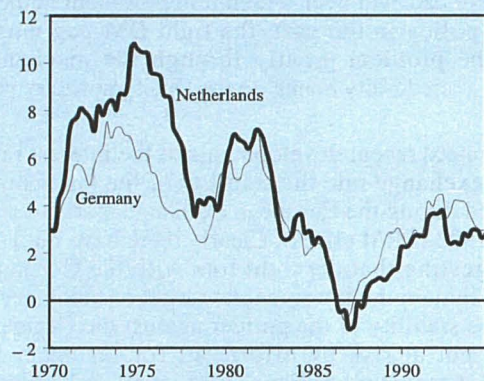
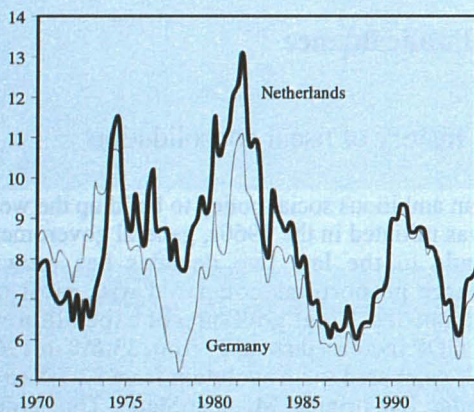
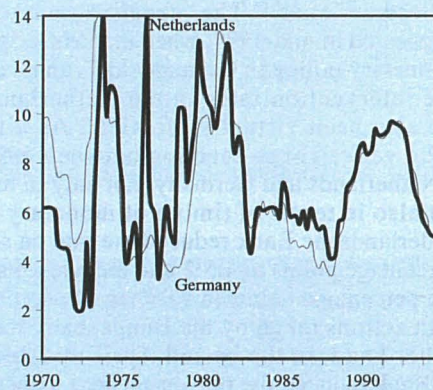
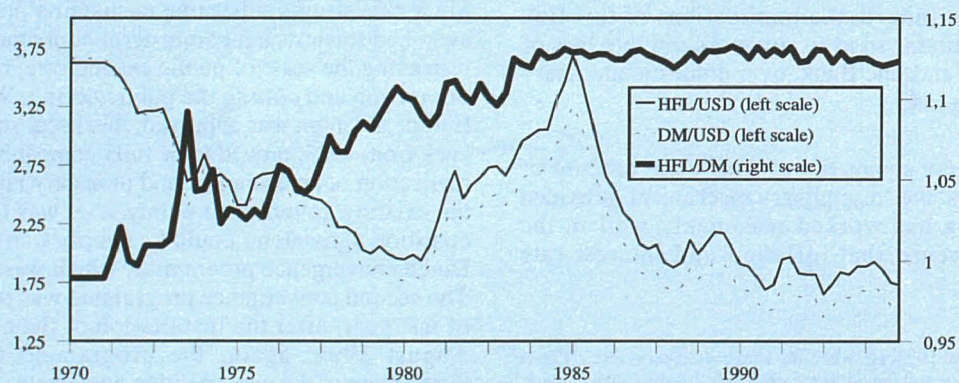
<sup>1</sup> The term is from den Dunnen (1985), who draws a distinction between technical and monetary objectives of money market and exchange-rate market policies conducted by the Nederlandsche Bank.

<sup>2</sup> den Dunnen (1985), p. 9, underlining added.

<sup>3</sup> An example of a situation where domestic and external objectives of monetary policy in the Netherlands seemed to require different interest rate moves by the Nederlandsche Bank was in the mid-1970s; 'excessive' growth of domestic credit combined with the objective of not wanting to pursue an exchange-rate policy of too strong a guilder.

<sup>4</sup> That is, the Dutch long-term interest rate is within the limits suggested by the simplest test for target-zone credibility from Svensson (1991); given uncovered interest parity and the ERM target zone, the annualized upper and lower limit for the 'rate-of-return' band (in quarterly data) is, respectively,  $(1 + \text{GLTIR}_t)(S^u/S_t)^{1/T} - 1$  and  $(1 + \text{GLTIR}_t)(S^l/S_t)^{1/T} - 1$ , where  $S_t$  denotes the current spot HFL/DM exchange rate,  $S^u$  and  $S^l$  are the weak and strong edge of the HFL (ERM-) target zone (HFL 1,12673 per DM  $\pm$  2.25%), and  $T$  denotes the average maturity of the underlying Dutch securities. As from 1979 the yield on long-term guilder-denominated asset has not, strictly speaking, remained inside these narrow limits, for the whole time at least, but the discrepancies are very small and have to do more with, for instance, measurement errors than with long-term credibility problems of the Dutch economic policy as such. Furthermore, for the more recent data (5-10 years) the narrow band has been increasingly respected by the observed long-term yield in the Netherlands.

<sup>5</sup> It should be noted that the evidence in favour of stationary inflation rate differential is not all that robust to, for instance, the choice of the lag length of the VAR used to test for cointegration. The coefficient structure is fairly robust to such choices, but marginal significance levels vary. Furthermore, the ADF-test for a unit root in the inflation rate differential gives mixed results.

**GRAPH 6a: Long-term inflation rates****GRAPH 6b: Short-term inflation rates****GRAPH 6c: Long-term interest rates****GRAPH 6d: Short-term interest rates****GRAPH 6e: Exchange rates**

disciplinary function of the DM-peg, alluded to earlier, seems to have worked well, at least during the last 10 years or so. Also, if there had ever been a credibility problem in the Dutch monetary policy in the past, the tight DM-peg must have reduced the problem greatly through the mechanism of generating a 'credibility bonus' to the Dutch monetary policy.

As for the more recent developments of the interest rates and HFL/DM exchange rate the stability of the latter remained uncontested during the European exchange market turmoil in 1992 and 1993 (ERM crises). Clearly there have not been any signs suggesting that the tight link with the German mark would not remain the intermediate target of monetary policy and that the stability of the guilder against the German mark would be put at risk by efforts at, for instance, a more independent monetary policy. This is well embedded in the basic data on interest rates and exchanges rates; beginning from late 1992, the guilder has been up to 0,7 percentage points above its central rate against the German mark. During the same time and up till mid-1994, Dutch short-term interest rates were below German ones.<sup>1</sup> The negative market rate differential disappeared in mid-1994, when markets judged that the easing of monetary policy in Germany had run its course. Since then, the intervention rates in the Netherlands and Germany have also been virtually identical. As a further indication of the very tight connection between monetary policies in the Netherlands and Germany, not only in terms of objectives, but also in terms of timing of monetary policy actions, the Nederlandsche Bank reduced the rate on secured loans by 0,3 percentage points to 4,5% and the rate on secured advances by 0,5 percentage points to 4,0% on 31 March 1995, well in line with actions taken by the Bundesbank the same day. On the other hand, in the period April-mid-June, the Nederlandsche Bank reduced the rate on secured loans in four equal steps from 4,5% to 4,1% and, in addition, the rate on secured advances by 25 basis points to 3,75% on 9 June. The main factor affecting the Nederlandsche Bank's decision to reduce the two rates was the strong position of the guilder *vis-à-vis* the Deutschmark (in the ERM grid). Hence, though the DM-link is very tight indeed, the implications of this link should not be taken too far so as to suggest complete loss of control, by the Nederlandsche Bank, over domestic monetary policy-relevant interest rates.

In summary, then, there seems to be a sufficient amount of evidence to suggest that the 'disciplinary mechanism' provided by guilder's DM-peg has worked reasonably well in the Netherlands in the sense that inflation and interest rate

differentials relative to Germany are at present, and have been for an extended period of time, negligible. This suggests that Dutch monetary policy seems to have enjoyed a 'credibility bonus' from the DM-peg. Finally, given the presently high degree of commitment, in monetary as well as in economic policy in general, to the DM-peg — which seems to be well supported also by the real sector of the Dutch economy — any significant discrepancy either in the overall Dutch monetary policy *vis-à-vis* the German one or in the timing of monetary policy actions *vis-à-vis* Germany are (highly) unlikely in the periods ahead. Hence, given this perception of long-term continuity of the present monetary policy, Dutch inflation rate and long-term interest rates will be almost fully determined by the corresponding German rates. Also, short-term interest rates in the Netherlands — though much more tightly related to policy actions than long rates — will follow ever more closely the corresponding German rates, given the high degree of (explicit and implicit) monetary policy coordination between the central banks.

## Chapter 3. Public finance

### 3.1. A long history of fiscal consolidation

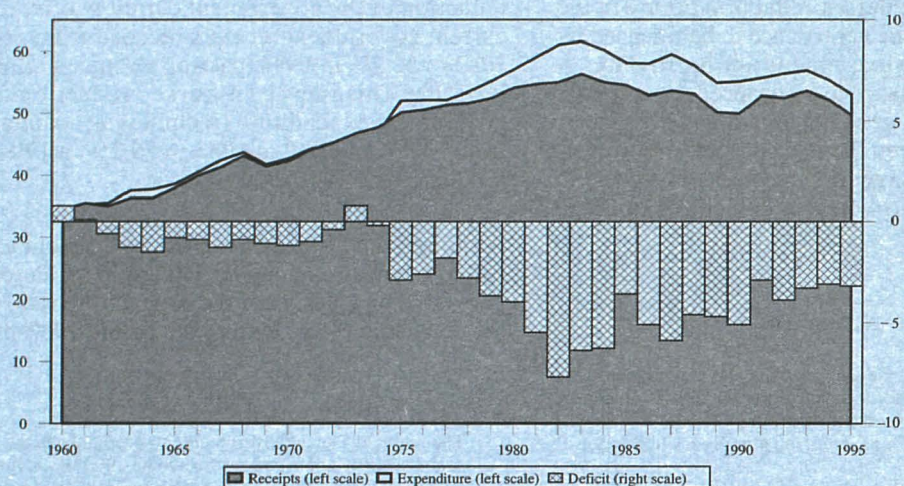
As a result of an ambitious social policy to build up the welfare state, which was initiated in the 1960s, general government in the Netherlands in the last two decades has grown to particularly large proportions compared with most other Community countries. Total government expenditure as a percentage of GDP increased steadily from 33,6% in 1960 to 61,5% in 1983, compared to an evolution from 32,7% to only 50,1% in the other five original Member States. The burden of taxation also became heavier, but not to the same extent. Consequently, the general government deficit went on growing to reach 7,1% of GDP in 1982.

Since this situation became unsustainable, fiscal policy was switched towards a medium-term adjustment with the aim of restricting the scale of public expenditure, reducing the burden of taxation and cutting the public deficit. When the Treaty on European Union was approved, this fiscal strategy, which dates back from 1983, proved to be fully compatible with the planned realization of an economic and monetary union. Consequently, the existing government policy, as it was laid out in the 1989 coalition agreement, could be simply translated into the first Dutch convergence programme, which was submitted in 1992. The second convergence programme was presented at the end of last year, after the installation of the new government in August 1994; again, the programme was essentially a restatement of the new coalition agreement.

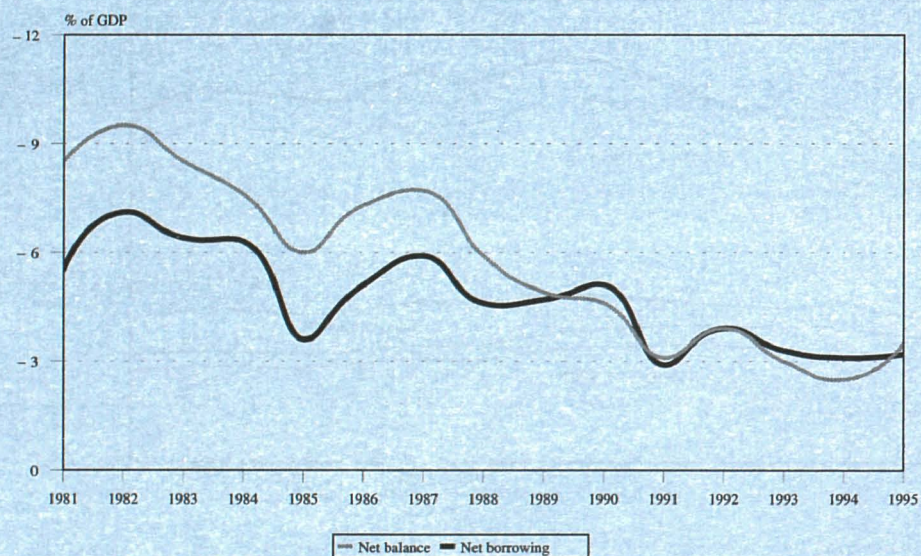
The fiscal adjustment effort has brought down general government net borrowing from 7,1% of GDP in 1982 to 3,1%

<sup>1</sup> During most of 1992 and 1993, i.e. when the Dutch short-term interest rates were below German ones and the guilder gain relative to the German mark, the special loan rate of the Nederlandsche Bank was reduced somewhat faster than the Bundesbank's repo-rate. By all account, this cannot be judged as a significant difference in monetary policy action taken by the two banks.



**GRAPH 7a: General government: Total expenditure, current receipts and deficit (as a % of GDP)**

Source: Commission services.

**GRAPH 7b: Net balance to be financed by the State and general government net borrowing**

Source: Commission services and Centraal Planbureau.



in 1994. In the European Union, only Germany, Ireland and Luxembourg currently have a lower deficit. Although the deficit evolution showed a clear downward trend over the considered period, there were substantial fluctuations around this trend. These fluctuations can partly be explained by the fact that the main objective of the deficit reduction policy in the Netherlands was, up to 1994, the net balance to be financed by the State,<sup>1</sup> and not general government net borrowing. A smooth evolution of the net balance to be financed can translate in a seemingly erratic behaviour of net borrowing because of differences in definition between the two concepts.<sup>2</sup> However, the failure to meet the pre-set target in some years, especially in the beginning of the period, also created deviations from the downward trend.

It is expected that the higher economic growth in 1995 and 1996 will facilitate the planned adjustment process, which could bring general government net borrowing below the EMU threshold of 3% in 1996. The necessary measures to reach this target are further described in Chapter 1 of Part II. The reduction of the government deficit was realized while total current government receipts receded from 56,2% of GDP in 1983 to 52,2% in 1994, passing through a minimum of 49,9% in 1990.<sup>3</sup> This implied a marked reduction of total general government expenditure (including net capital expenditures) from 61,5% of GDP in 1983 to 55,2% in 1994, with a lowest level of 54,8% in 1989.

Although the level of general government expenditure has fallen, it remains among the highest in the European Union.<sup>4</sup> In general, the evolution of the expenditure ratio was opposed to the economic cycle. During the period 1983-89, when growth

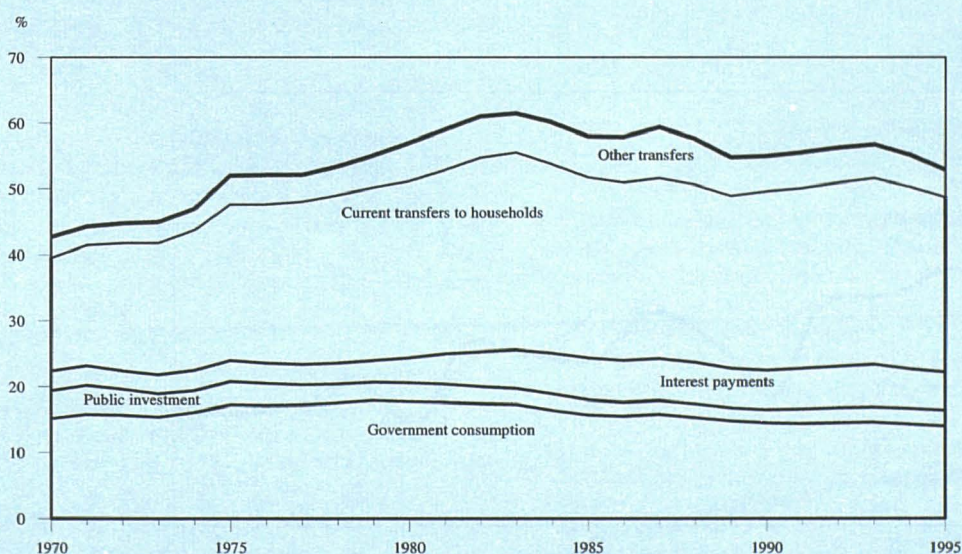
<sup>1</sup> To obtain a more economically relevant concept, the net balance to be financed by the State is corrected for some distortionary factors. Examples of such corrections are off-budget items, early redemption of loans to social building corporations, student loans, etc. (see also Box 1 in Section 1. (Part II) of this study).

<sup>2</sup> The main differences are the divergent accounting of cash-accrual differences and privatization revenues. General government net borrowing also contains the deficits of the social security sector and local authorities. Although these sectors are on average approximately in equilibrium, they can influence net borrowing in some years (see also Box 1 in Section 1. (Part II) of this study).

<sup>3</sup> The previous Dutch Government intended to keep the burden of taxes and social security contributions below the 1990 level. However, to be able to attain the deficit objective, the tax objective had to be relaxed.

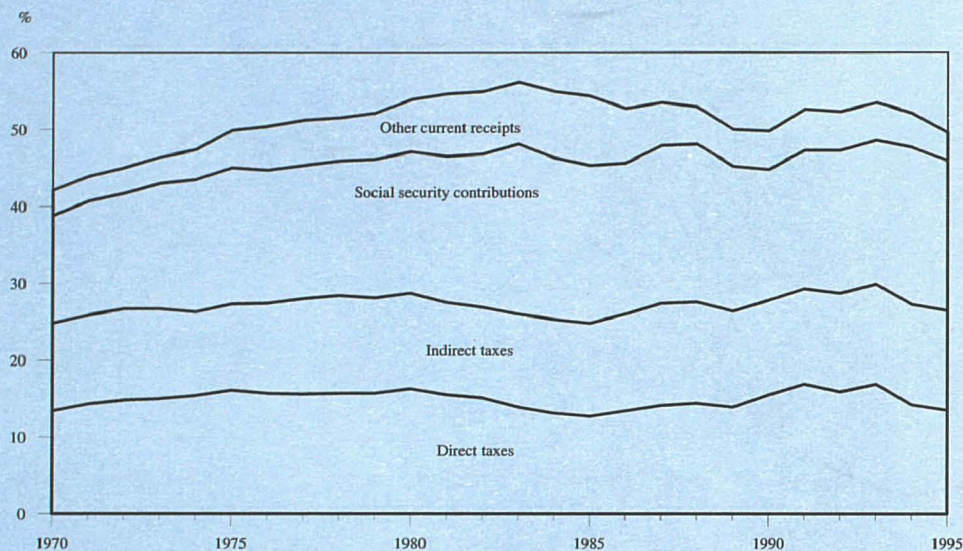
<sup>4</sup> In 1994, the general government total expenditure ratio was 55,2% of GDP in the Netherlands, compared to the EU average of 51,5%. France (55,4%) and Belgium (55,6%) are approximately at the same level, while only the Scandinavian Member States Finland (60,2%), Denmark (62,7%) and Sweden (70,3%) have significantly higher expenditure ratios.

**GRAPH 8a: Composition of general government total expenditure (as a % of GDP)**



Source: Commission services.



**GRAPH 8b: Composition of general government current receipts (as a % of GDP)**

Source: Commission services.

accelerated, the ratio declined sharply, owing to a reduction of the government wage bill, current transfers to households and public investment. When growth slowed down after 1989, the restrictive expenditure policy was continued, but not to the extent to completely compensate for the negative cyclical effect and to prevent a slow rise of the expenditure ratio. With the improvement of the economic cycle in 1994, the trend in the expenditure ratio turned downwards again, which is expected to continue in 1995 and 1996. Once more, the expenditure cuts are concentrated in current transfers and the compensation of government employees; low interest rates also generate lower interest payments as a percentage of GDP.

Given that total Dutch government expenditure remains among the highest in the Union and the deficit is now among the lowest, government receipts had to remain relatively high.<sup>1</sup> The evolution of total current receipts was clearly not the result of an anti-cyclical policy: during the economic upswing in 1983-

89 current receipts were lowered, they picked up again when growth decelerated and they finally started declining in 1994 with the start of the recovery. The image of the evolution of the various components of total current receipts was seriously blurred by a number of tax reforms. A good example is the general income tax reform in 1990 (Oort reform), which shifted the financing of some social expenditure funds<sup>2</sup> from employers' social contributions to direct taxation of households,<sup>3</sup> which was reversed in 1994 by a shift from direct taxation to social contributions by employees.

### 3.2. Resilient debt ratio

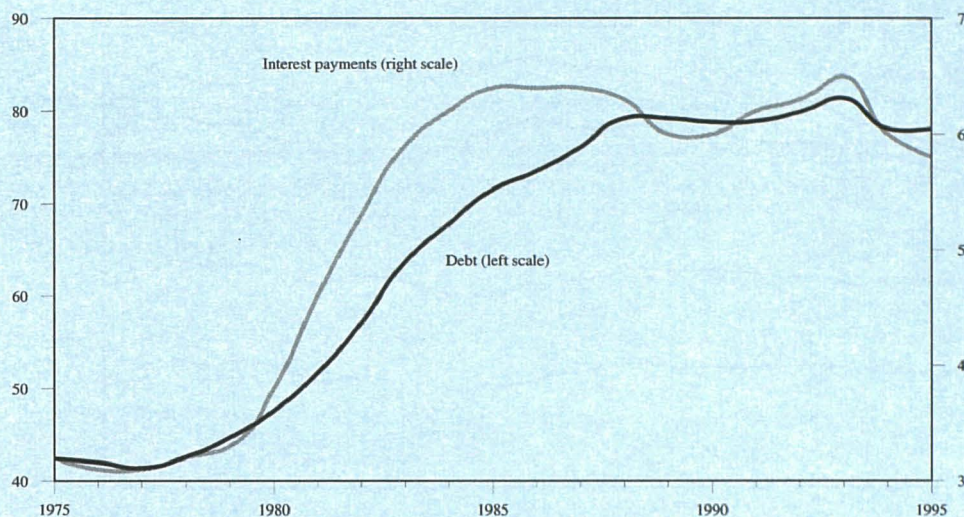
Due to the worsening deficit performance between 1977 and 1982, the debt ratio deteriorated considerably from 41,4 to 63,7% of GDP. Despite the gradual improvement of the

<sup>1</sup> General government current receipts attained 52,1% of GDP in the Netherlands in 1994. Only Finland (54,6%), Denmark (58,7%) and Sweden (59,9%) had higher current receipts.

<sup>2</sup> The concerned social security funds were the AAW (Algemene Arbeidsongeschiktheidswet, General Disability Law) and the AWW (Algemene Weduwen en Wezenwet, General Widows and Orphans Law).

<sup>3</sup> The income loss for employees was compensated by a higher gross wage.



**GRAPH 9: General government gross debt and actual interest payments (as a % of GDP)**

Source: Commission services.

government deficit in the following years, the persisting low nominal GDP growth prevented any improvement in the debt ratio, which continued to increase, albeit on a slower pace, to reach 79,2% of GDP in 1988. From then on, the ratio was approximately stabilized around 80% of GDP, although a slight upward tendency pushed it to its highest recorded level of 81,4% in 1993.

The rapid debt accumulation and the high nominal interest rates of the early 1980s increased the interest charges markedly from around 3% of GDP in the 1970s to around 6% in the early 1990s. Since interest payments cannot be reduced easily by the government without disrupting the financial markets, primary expenditures had to be reduced even more to contain the government deficit. As a result, the primary deficit turned into a surplus again starting in 1985.

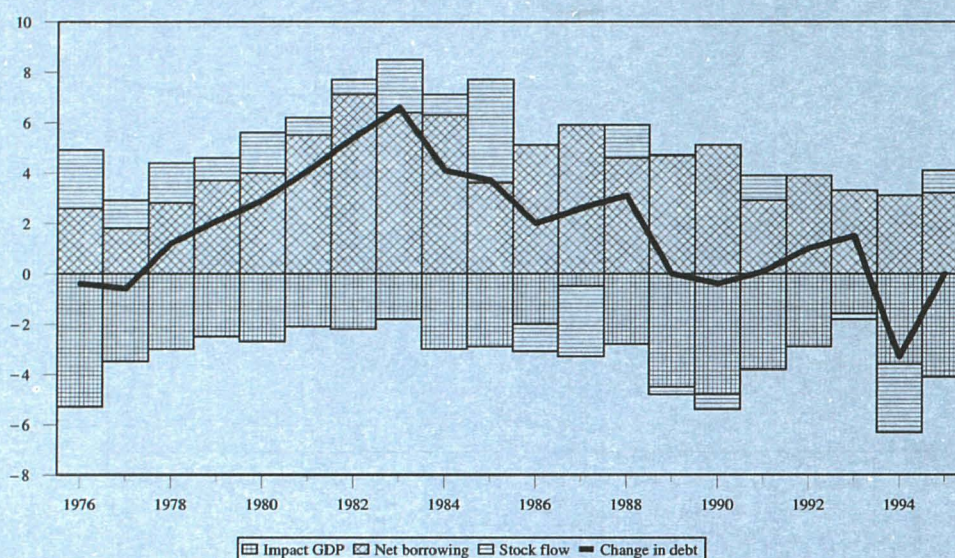
In 1994, a reduction of the debt ratio was realized through important one-off operations, consisting of privatization receipts and the proceeds of the early redemption of government loans to the social building corporations. Given the expected continued downward trend of the deficit, the

economic recovery and the receipts from the privatization of the second part of the postal and telecommunications service KPN, the debt ratio should normally also decline in 1995 and 1996. However, this decrease will be compensated in 1995 by the one-off effect of an important financial operation in the social building sector.<sup>1</sup> As a consequence of this considerable debt increasing stock-flow adjustment (around 1% of GDP), the debt ratio is not expected to decline in 1995. However, over the three-year period 1993-96 it may decline by 4,3 percentage points from 81,4% of GDP to 77,1%.

<sup>1</sup> In this operation the government pays, in 1995, the discounted value of all future subsidies to the social building corporations, while these corporations will redeem all currently outstanding government loans. Although, on average, this operation should be approximately neutral for future deficits (on the one hand the government will pay less subsidies, but on the other hand there will be less interest receipts on outstanding loans), in the first years there might be a considerable gain of around  $\frac{1}{4}$  % of GDP for the government, which will be reversed around the year 2003 (Van Putten (1994)). However, there is an important effect on the evolution of public debt in 1995 since the present value of the future subsidies is approximately HFL 10 bn (1,7% of GDP) higher than the outstanding loans to public housing corporations.



GRAPH 10: Contributions to the change in general government gross debt (as a % of GDP)



Source: Commission services.

## Chapter 4. The labour market situation

### 4.1. High population growth generates unemployment

During the last 35 years, the population has been growing in the Netherlands at a yearly average rate of 0,9%, almost double the EU average of 0,5%. The growth rate slowed down gradually up to 1983, but accelerated again afterwards, which resulted in an accumulated population growth of 36,3% over the period 1960-95, the highest in the Union. Since the high birth rate and the immigration of mostly younger people are the main causes for this evolution, the population at working age (15 to 64 years) has been growing even faster by 1,2% yearly on average, compared to an average for the Union of only 0,6%. However, in contrast to total population growth, the increase of the population at working age is slowing down and approaching the EU average.

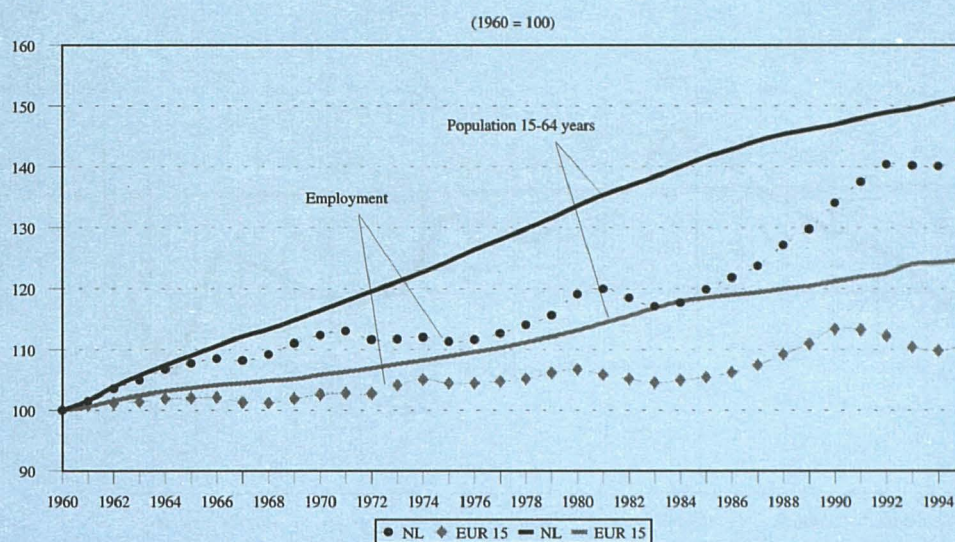
Until the first oil-price shock, employment creation was strong enough to follow population growth and to keep unemployment

at a low level. Afterwards, the rapid build-up of unemployment with each oil-price shock, and the insufficient generation of new jobs to reduce unemployment again between the two shocks, created a staircase-like pattern in the unemployment ratio, which increased from 1,0% in 1970 to 11,9% in 1982 (harmonized Eurostat unemployment rate). However, this pattern disappeared after 1983, when the unemployment rate started to fall again for the first time since the 1960s, and reached 5,6% in 1992. The recent economic slowdown put an end to this favourable evolution and unemployment started rising again to 7,0% in 1994. As shown in Graph 11a, the main reason for the sharp unemployment increase in the Netherlands is not job destruction, which was the case in most other Member States, but insufficient employment creation to keep up with the continuing labour supply growth.

As in most other Member States, unemployment is not evenly spread over the various groups of the population. Although the labour market participation rate of women remains considerably lower than the male participation rate (47,0%, compared to 75,5% for men), they take up about half of total unemployment. As a consequence, the female unemployment rate is almost double that of males. In looking at the age

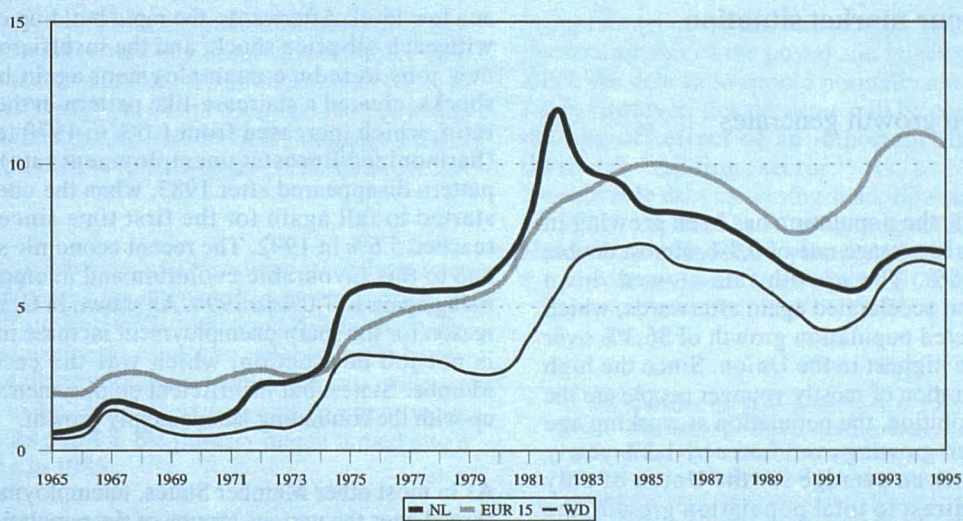


**GRAPH 11a: Population at working age (15-64 years) and employment**



Source: Commission services.

**GRAPH 11b: Unemployment (as a % of civilian labour force)**

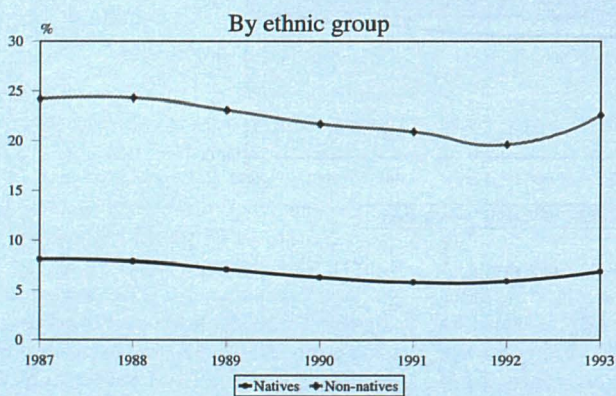
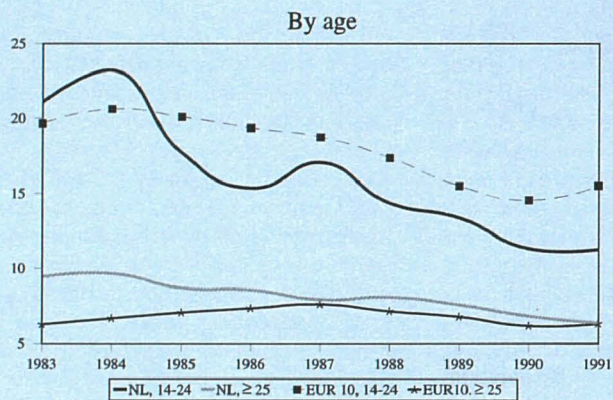
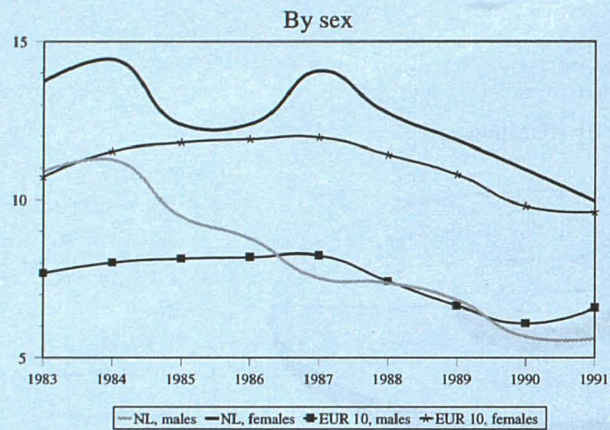


Source: Commission services.



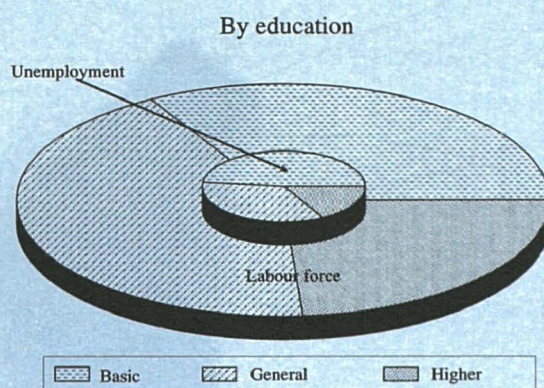
## attention flash

GRAPH 12: Composition of unemployment

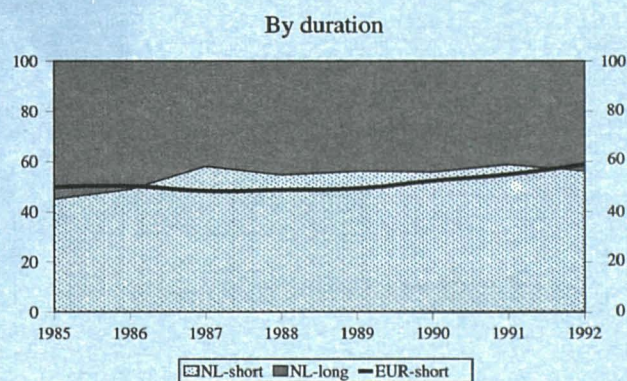




GRAPH 12: (Continued)



Source: CBS, labour force survey, 1993.



1985 and 1986: EUR 10; from 1987: EUR 12

Source: Eurostat.

**Table 2****Population of working age**

	1987	1988	1989	1990	1991	1992	1993	1994
Population of working age	10 024	10 107	10 168	10 228	10 294	10 349	10 420	10 473
Labour force	5 743	5 867	5 929	6 063	6 189	6 296	6 406	6 466
Employed	5 257	5 378	5 477	5 644	5 790	5 885	5 925	5 920
Unemployed	486	490	452	419	400	411	481	547
Registered, actively looking for work		375	336	292	270	260	327	385
Not registered		115	116	127	130	151	154	162
Inactive population	4 281	4 240	4 238	4 165	4 105	4 052	4 014	4 007
Registered unemployed, not searching for work						76	87	100
Retired early						231	245	
Disabled (for the record) <sup>1</sup>	817	835	857	891	907	921	930	920

<sup>1</sup> Partly disabled may be working or unemployed.

Source: CBS.

structure of unemployment, one can observe that unemployment diminishes with age. This is particularly true in periods of lower employment creation when young people have problems to enter the already crowded labour market. However, compared to other Member States, youth unemployment is relatively low. The unemployment rate among older people also tends to be limited because they often leave the labour market through disability or early retirement systems. The lowly educated people are another group in the labour market with above average unemployment: while they take up less than a third of the working population, they represent almost half of the unemployed. Among people with only primary education, unemployment runs up to 15,6% (1993). Foreigners (especially Turks and Moroccans) also have more problems to find employment. With an unemployment rate of 18,5% (1993), approximately three times higher than the unemployment rate of Dutch nationals, they represent almost a quarter of the total unemployed population.

The share of long-term unemployment increased rapidly in the 1980s, but declined somewhat recently, which is merely the effect of the new higher inflow into the unemployment system because of the rising unemployment. If these newly unemployed do not manage to leave the unemployment system during the current recovery, the share of long-term unemployed can be expected to start rising again. Approximately half of the unemployed are now long-term unemployed, which is close to the European average. In contrast to the composition of overall unemployment, the long-term unemployed tend to be male and older. This illustrates that older people have more difficulties finding a new job once they become unemployed. Long-term unemployment is also concentrated with lowly educated people and people on an expected low wage.<sup>1</sup> This segment of the labour market is often referred to as the low end of the market.

Not only unemployment increased, but also other forms of inactivity and hidden unemployment, such as early retirement and disability, expanded. Especially the disability scheme, which contains an unreasonably high number of almost 900 000 people out of 10,5 million people of working age, has been used to lower the supply pressure on the labour market. The most significant decrease in labour market participation was registered for older men (60 to 64 years), whose participation rate dropped from about 75% in 1970 to only 20% now. The systematic policy to remove excess supply from the labour market by facilitating the entry into a number of social security schemes has contributed significantly to the high degree of inactivity in the labour market and the associated low participation rate. The persistence of this phenomenon is illustrated by the fact that a more complete discussion of the low participation rate in the labour market was already included in the Commission's previous country study on the Netherlands, which dates back to 1992.

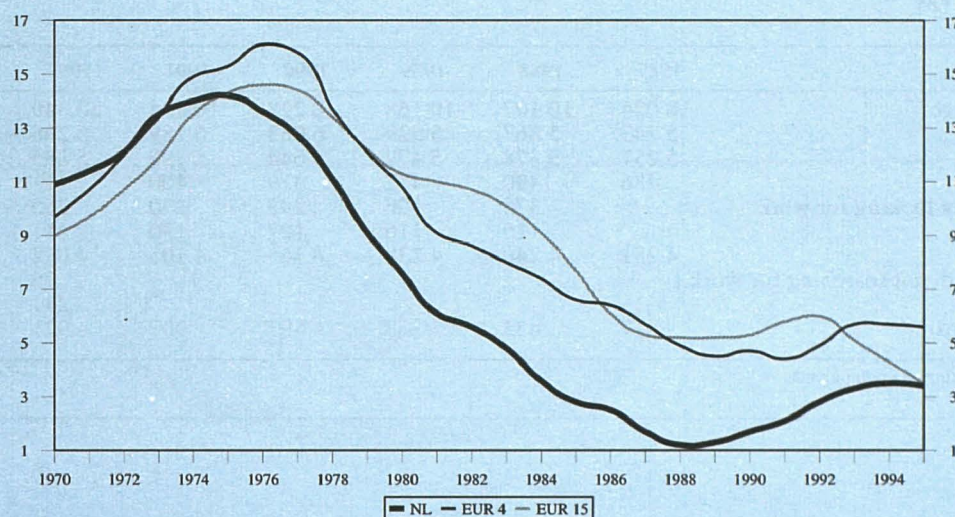
#### 4.2. Wage moderation creates more employment

Since the early 1980s, there has been a broad consensus between employers, unions and the government to moderate the nominal wage evolution, in order to create more employment. Since then, the nominal wage increase was consistently lower than in its major trading partners, although the difference was smaller in the 1990s. However, part of the competitive advantage of this favourable wage development was eroded by the appreciation of the Dutch guilder, which is illustrated in Graph 13b by the difference between the evolution of the

<sup>1</sup> Ministerie van Sociale Zaken en Werkgelegenheid (1994a).

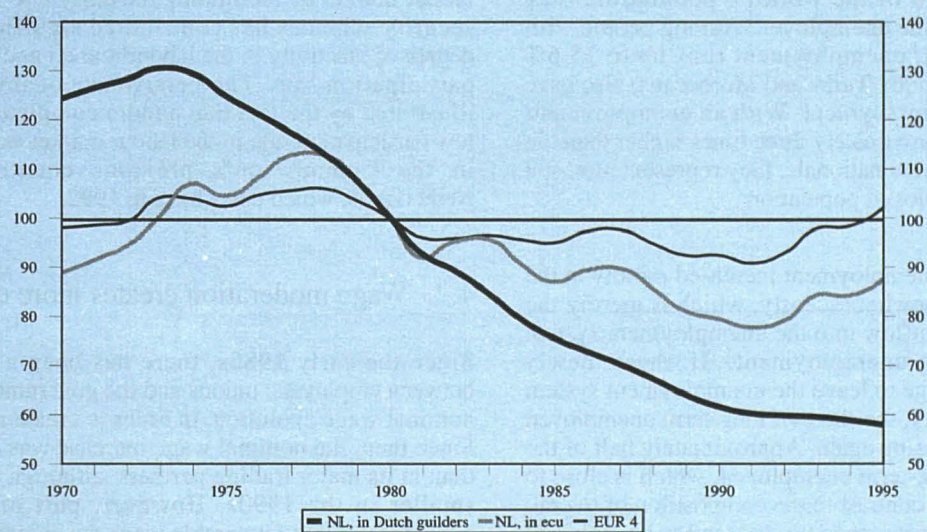


**GRAPH 13a: Nominal compensation per employee (annual percentage change, five-year moving average)**



NB: EUR 4 = B, DK, WD, F.  
Source: Commission services.

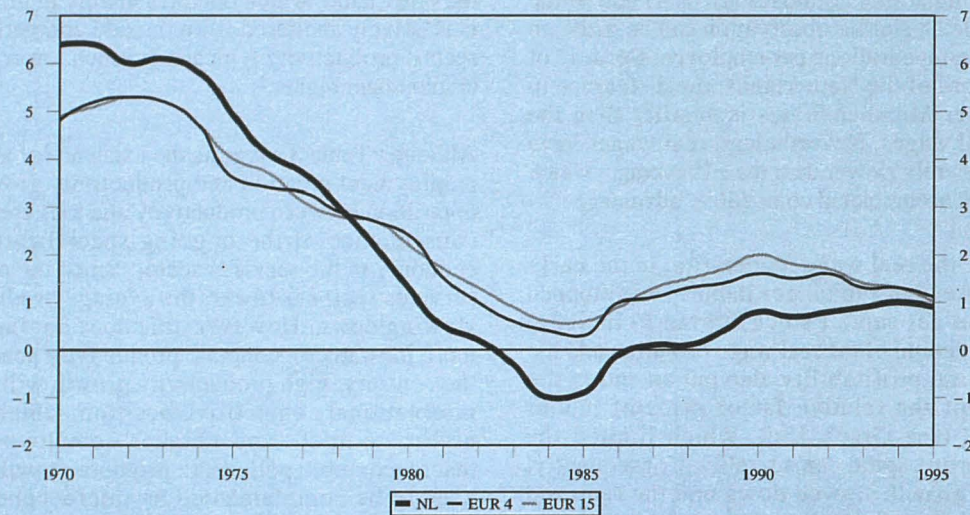
**GRAPH 13b: Nominal compensation per employee (relative to EUR 15 (EUR 15 = 100), 1980 = 100)**



EUR 4 = B, DK, WD, F.  
Source: Commission services.

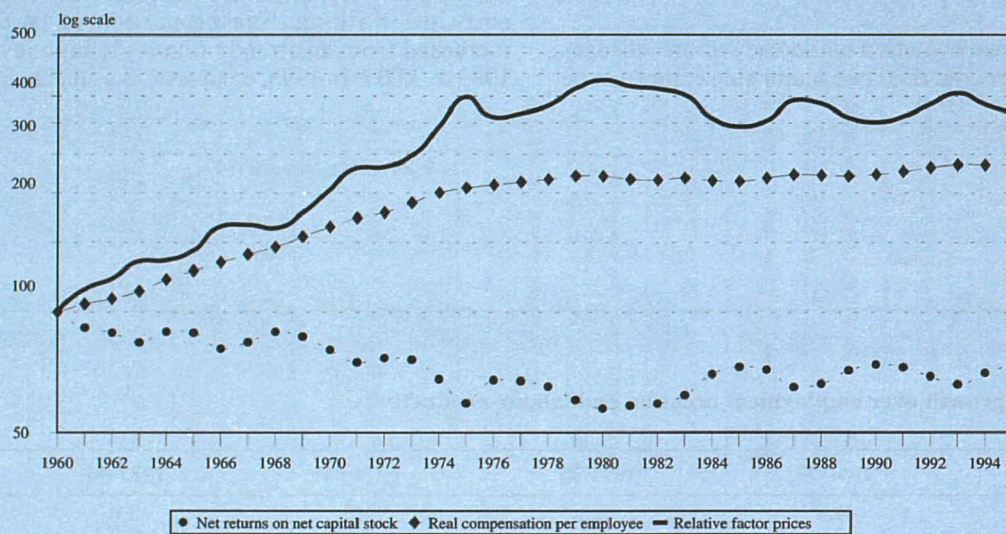


**GRAPH 13c: Real compensation per employee, deflator private consumption (annual percentage change, five-year moving average)**



EUR 4: B, DK, WD, F.  
Source: Commission services.

**GRAPH 13d: Relative factor prices of labour and capital (1960 = 100)**



Source: Commission services.

nominal compensation per employee expressed in guilder and in ecu. However, this graph also shows that the remaining gain, expressed in common currency, is still significant, both compared to other comparable countries (EUR 4) and to the Community as a whole. A similar observation can be made on the evolution of real compensations per employee. Because of the low inflation record of the Netherlands, the difference in real wages with other Member States is smaller than the difference in nominal wages. Nevertheless, real wages have been increasing consistently slower than the EU average, which generated an important accumulated competitive advantage.

As a consequence of the real wage moderation in the early 1980s, the declining trend of capital profitability was stopped and the net return on net capital stock started to increase slightly again. The flattening of the real wage evolution and the improvement of capital profitability also put an end to the deteriorating trend of the relative factor price of labour compared to capital (see Graph 13d), which limited the substitution of labour by capital considerably. Consequently, labour productivity growth slowed down and the required increase of the capital stock for a given economic growth was reduced, which led to a higher employment content of growth.<sup>1</sup> During this period of high employment combined with low labour productivity growth, approximately three quarters of economic growth in the Netherlands was associated with employment creation, while the remaining part consisted of productivity growth. Even in the period of reduced economic growth after 1989, employment creation remained high as compared to GDP growth. This break compared to the previous period of very low employment creation (1974-84) can be attributed to the changed emphasis towards wage moderation.

However, this aggregate evolution masks the sectoral changes which occurred. In broad terms, two major subsectors can be

identified. The open sector competes on international markets and has to be highly competitive, which implies that employment growth tends to be lower. The services sector, on the other hand, which operates mainly in the domestic market, is relatively sheltered from outside competition. In this latter sector, productivity typically is much lower and the growth of employment higher.<sup>2</sup>

Although Table 3 suggests the existence of a trade-off between employment creation and productivity growth, this apparent opposition between productivity and jobs creation is mainly the consequence of the ongoing specialization of the Dutch economy in the services sector. Since the productivity in the services sector is lower, the average productivity growth is slowing down. However, this does not imply that to create more jobs, microeconomic productivity needs to go down. On the contrary, high productivity growth will lead to a stronger international competitive position, which should generate higher output and higher employment. Therefore, macroeconomic policies to promote growth and employment need to be complemented by microeconomic measures to improve the productive potential of the economy. Such measures comprise promoting competitive business behaviour and reducing unnecessary regulation in product markets (see also Chapter 3 of Part II and Annex 1); but also improvements in the education system, public infrastructure and investment in research and development can raise the productive potential of an economy.

Although the number of persons employed has risen significantly, employment in man-years has grown at a much slower pace because job creation was heavily concentrated on part-time working. The proportion of part-time workers increased from an already relatively high level of 21,1% in 1983 to 35,0% in 1993, compared to a change for the European

<sup>1</sup> Matthes (1989).

<sup>2</sup> De Vries (1994), Van Ark (1994).

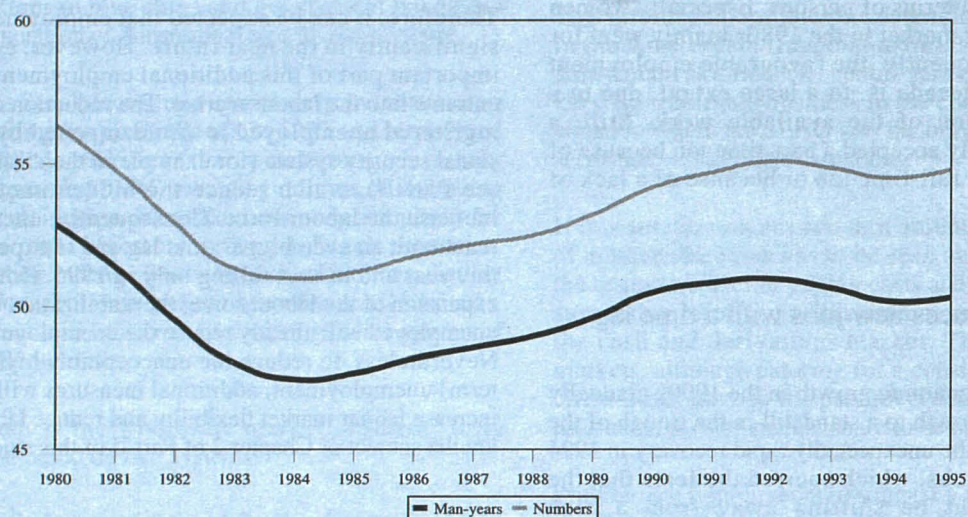
**Table 3**

**Distribution of real growth over employment creation and labour productivity**

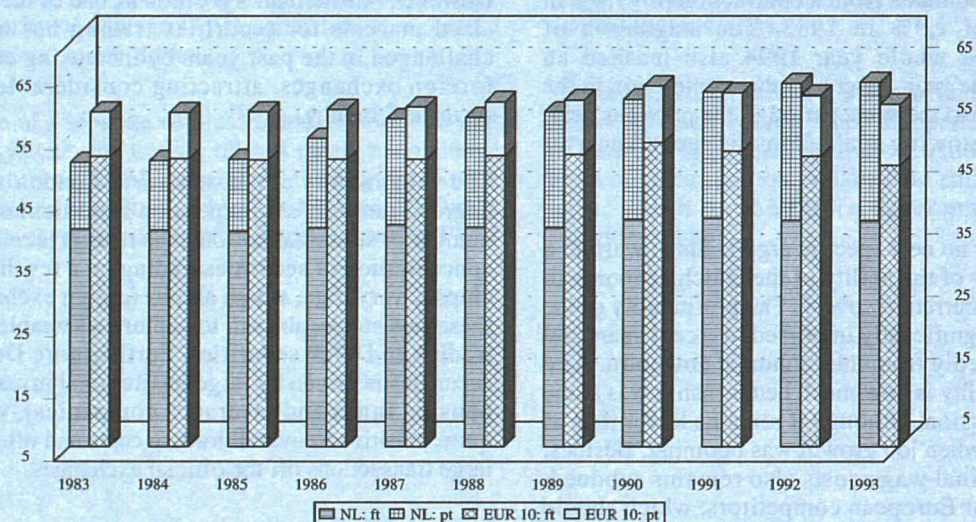
	1961-73	1974-90	1974-84	1985-90	1991-94
GDP	4,8	2,2	1,7	3,0	1,6
Employment	0,9	1,1	0,5	2,2	1,1
Productivity	3,9	1,1	1,2	0,8	0,5
Employment/growth	18,8%	50,0%	29,4%	73,3%	68,8%
Productivity/growth	80,5%	49,5%	70,2%	26,1%	30,9%

Source: Commission services.



**GRAPH 14a: Employment (as a % of the population aged 15-64)**

Source: Centraal Planbureau.

**GRAPH 14b: Employment: persons in employment, full-time (ft) and part-time (pt) (as a % of the population aged 15-64)**

Source: Eurostat.

Union from 12,1 to 16,4% in the same period. As a consequence, the improvement of the participation rate in full-time equivalents has been less outspoken than the progress of the participation rate in terms of persons. Especially women who entered the labour market in the 1980s mainly went for part-time jobs. Consequently, the favourable employment evolution in the last decade is, to a large extent, due to a voluntary redistribution of the available work. Still, a significant minority only accepted a part-time job because of the unavailability of a full-time job or because of a lack of child-care facilities.

### 4.3. Recovery produces new jobs with a time lag

The slowing-down of economic growth in the 1990s gradually brought employment growth to a standstill in the trough of the recession in 1993. Yet, the unexpectedly rapid recovery in 1994 did not generate new jobs, which spurred the fears that the Dutch economy might be shifting away from a high employment-low productivity model to a phase of jobless growth. However, this concern seems somewhat premature for a number of reasons. The lagging employment creation is mainly the counterpart of the lagging employment destruction (labour hoarding) in the downward phase of the cycle. Initially, additional production can still be covered with the existing employment. In a later phase, first temporary employment increases, which was already observed in 1994, and only afterwards new permanent posts are created. This evolution was also observed after recessions in the past, such as in 1982, when employment continued to decrease significantly in 1983 while GDP growth rebounded from a contraction of -1,4% in 1982 to a growth of 1,5% in 1983. The stagnation of employment over the whole year 1994 also masked an improvement during the year. After a further contraction in the first quarter, compared to the same period of the previous year, employment started growing again from the second quarter onwards.

Furthermore, there are no new specific arguments to warrant a more pessimistic view of the ability of the Dutch economy to create new jobs in the current recovery. The profitability of the enterprises has been significantly improved in recent years and has not suffered markedly from the economic downturn. As a consequence, profitability is now much better than it was at the time of the 1982 recession, although it remains lower than at the end of the 1980s, when job growth was booming. Besides, the evolution of nominal wage costs also remains subdued, compared to the major European competitors, which should continue to promote employment creation. Although there remains a lack of flexibility in both the labour market (see Part II) and the product markets (see Annex 1), the awareness about these problems has increased and measures are being taken. Therefore, the dampening effect of these structural issues on

employment creation should certainly not be more important than in the past, on the contrary.

Therefore, it can be expected that employment will recover significantly in the near future. However, as in the past, an important part of this additional employment will go to new entrants into the labour market. The reduction of the number of registered unemployed is also dampened by reforms in the social security system (for example in the disability scheme — see Part II), which reduce the hidden unemployment and increase the labour force. Consequently, unemployment will react with an even bigger time lag and is expected to stabilize this year and to start falling only in 1996. However, given the expansion of the labour force, the stabilization of the number of unemployed will already reduce the unemployment rate in 1995. Nevertheless, to reduce the unacceptably high level of (long-term) unemployment, additional measures will be necessary to increase labour market flexibility and reduce labour costs, which are the subject of Chapter 2 of Part II of this study.

## Chapter 5. Financial markets: Reform of the Amsterdam Stock Exchange to maintain competitiveness

The Dutch financial system has, as compared to other continental financial markets, been traditionally based on securitization of financial assets. This has allowed Amsterdam to develop a securities market which is relatively large compared to the size of its economy.

However, Amsterdam's position as one of the largest medium-sized markets for securities trading has been effectively challenged in the past years by increasing competition from foreign exchanges, attracting considerable parts of Dutch securities' trading.

The vulnerability of Amsterdam to London's (and to a minor degree Frankfurt's) competition is particularly elevated for a number of structural reasons; the market is relatively small, the concentration of securities trading on a few highly liquid blue chips is very high, which allows foreign exchanges, by trading these few stocks abroad, to capture a sizeable share of overall trading in Dutch securities. Furthermore Dutch demand for securities is driven by large institutional investors (a few large pension funds and insurance companies), which tend to be quite sensitive to overall trading costs and often engage in very large transactions off the official exchanges.

The shift in institutional investors' portfolios from loans to securities, having occurred over the past few years, is an element of support for the development of Dutch securities markets. Nevertheless, trading on the Amsterdam Stock Exchange (ASE) and the European Options Exchange (EOE),

the exchange for Dutch financial derivatives, grew less than in other European financial centres. This threatened to prevent Amsterdam from maintaining the 'critical mass' for large-volume transactions in blue chips and government bonds and thus the overall position of Amsterdam as a financial centre.

The Amsterdam Stock Exchange completely overhauled its trading system for government bonds in 1993 and introduced for the other traded securities (shares and non-government bonds), on 30 September 1994, sweeping reforms of its trading system, in order to increase its attractiveness, particularly for the large institutional investors trading in Dutch securities. From this date, the exchange has been divided into two distinct segments, one for wholesale and the other for retail business. The retail segment will build on the former general system of an order-driven floor screen.

The new element is the wholesale market segment, fully computerized and based on two systems:

1. The 'automatic interprofessional dealing system' (AIDA) serves as the system for dealer-to-dealer-transactions, that means transactions between members of the exchange which form the inner core of the professional market, allowing the dealers to enter into arbitrage transactions or book balancing operations in a very efficient manner.
2. The 'Amsterdam Stock Exchange trading system' (ASSET) is open to non-dealers as well, as it allows the dealers to look via this system for clients and make the respective deals. It only covers a small list of internationally traded government bonds and stocks, which account, however, for the vast majority of deals in Dutch securities. It is, unlike the retail-segment, quote-driven.

This introduction of a separate wholesale market with new and distinct trading systems and trading rules is meant to challenge the role of the international segment of the London Stock Exchange which had attracted an increasing share of Dutch securities trading (according to estimates, up to around 45% of

share transactions and 80% of bond transactions were done via the London SEAQ).

This reform demonstrates the determination of the participants in the Amsterdam financial markets to fight the erosion of Amsterdam as a financial centre. It is certainly a useful step for keeping wholesale business in the country and it will end the situation where the SEAQ was the only market ready for Dutch securities' wholesale transactions.

If it is able to stop or even turn around the continuing erosion of market share this has to be seen and will partly depend on the respective overall trading costs and the progress of eventual supporting reforms in Amsterdam, such as the integration of the cash and derivatives market. The French and German markets, although catering for a considerably larger domestic client basis, have in the past succeeded implementing similar reforms to reverse market share losses to London.

Preliminary figures seem to suggest a parallel development for the Damrak, the Amsterdam Stock Exchange; according to its own information, market share for Dutch securities trading grew in the first quarter to 65%, up from 55% two years ago. Furthermore, for most of the shares also traded in London, the 'spread' between the buying and selling price has been smaller in Amsterdam, pointing to a more liquid and thus efficient market than its main competitor.

The European Options Exchange might go a step further, opening its settlement facilities also to transactions off the floor. It considers such a strategy to be crucial for keeping large-volume business, in particular transactions initiated by institutional investors.

However, Amsterdam's structural features, such as the relatively small volume when compared to London, Frankfurt or Paris, its high concentration and the already achieved high level of securitization, will remain and might, in the medium term, weigh on the future development of Amsterdam's securities trading.



## **Part II — Major economic policy objectives**





## Introduction

At the time of the approval of the Treaty on European Union, there remained a considerable gap between the Dutch Government deficit and debt situation and the convergence criteria on public finance that were laid out in the Treaty, even though the Netherlands had already started its fiscal consolidation policy in the early 1980s. In 1992, when the first Dutch convergence programme was submitted, the general government deficit stood at approximately 4% of GDP, one percentage point above the EMU reference value, and the debt ratio had run up to around 80% of GDP, considerably above the 60% reference value. Given the achieved monetary stability, which placed the Netherlands as an actual candidate for EMU, the improvement of the public finance situation should get first priority.

However, the problems were not limited to the public finance field. The inactivity rate in the labour market was among the highest in the Union, with high degrees of disability, early retirement, absence for sickness and part-time working. The social security outlays that were associated with the high inactivity rate put a heavy burden on the budget, especially since not only the number of people in the various social security schemes was elevated, but also the level of the social benefits was very generous. This high social benefit level was a disincentive for low-skilled workers to try to enter the labour market, since the difference between the social benefits and the wage level was too small. Furthermore, since some social benefits and subsidies are income-related, the average marginal tax pressure for the lowest income groups has a very steep profile. To be able to finance the high social expenditures, taxes and social security contributions had to be increased to elevated levels, given the narrow tax base provoked by the low participation rate. The high tax burden further reduced the incentives to participate in the labour market and increased pressure on wages, since employees try to shift the higher tax burden to employers during wage negotiations.

The first two chapters of this second part of the study evaluate the two main economic policy objectives of the government: reducing the government deficit and debt to comply with the EMU criteria, and lowering taxes and social security charges to promote labour market participation. However, given the multiple interactions between the two objectives, few policies are targeted at only one of these two objectives. Therefore, the strict separation of the objectives in two different chapters will be complemented, when appropriate, by cross-references to indicate the relation with the other objective.

However, the creation of a more dynamic labour market needs to be supplemented by more dynamic product markets. Collusive behaviour and protection from outsiders are widespread in some sectors of the Dutch economy.

Subsequently, the Dutch authorities intend to accelerate legislative reforms to increase the competition level and reduce overly protective regulations. Annex 1 describes the current situation and tries to determine some possible macroeconomic consequences. Chapter 3 of this part takes a closer look at recent policy measures and proposals.

## Chapter 1. Curbing the public finance situation to comply with EMU convergence criteria

### 1.1. The first convergence programme (1992-94)

In March 1992, the Dutch authorities presented a first convergence programme, which described and explained the medium-term policies for fiscal consolidation in the period 1989-94 that were agreed when the previous government coalition came to office at the end of 1989. The objective was to lower the central government deficit ratio by approximately  $\frac{1}{2}$  percentage point of GDP yearly, which would be translated in a similar reduction of general government net borrowing.<sup>1</sup> As a consequence, the general government deficit would fall below the 3% EMU threshold already in 1993, while from the same year onwards the debt ratio would be set on a downward path. The government also intended to keep the burden of taxes and social security contributions below its 1990 level and wished to maintain the purchasing power of social security benefits, which implied a sharp decrease of the public expenditure ratio to attain the desired deficit reduction.

The achievement of the programme's targets was considerably hampered by a much worse than expected economic situation. Especially in 1993, economic growth was considerably lower than foreseen in the programme. As a consequence, the anticipated unemployment stabilization was not realized and the unemployment rate rose by more than two percentage points between 1992 and 1994. Moreover, the inflow into the sickness and disability schemes continued at a high pace, instead of the envisaged stabilization at the 1989 level, which put additional pressure on the budget.

Consequently, in 1992 and 1993 the government had to adopt several important additional savings packages to keep the deficit in line with the intended path. Measures included abandoning the automatic indexation of social security benefits, further cuts in subsidies, not correcting tax brackets for inflation and a number of one-off measures. As a result of the additional savings packages, the original central government

<sup>1</sup> In fact the target for the central government ratio was set in relation to net national income (NNI) instead of GDP; a reduction of the deficit ratio by 0.5% of NNI corresponds to a reduction of 0.45% of GDP. To avoid unnecessary complications, all ratios in this study are calculated in relation to GDP.

**Table 4****Assumptions and objectives (A/O)<sup>1</sup> of the first Dutch convergence programme and the realizations (R)<sup>2</sup>**

	1992		1993		1994	
	A/O	R	A/O	R	A/O	R
GDP <sup>3</sup>	1,4	1,3	2,6	0,3	2,6	2,4
Unemployment <sup>4,6</sup>	7,6	5,6	7,5	6,7	7,5	7,7
Total tax burden <sup>5,6</sup>	47,5	52,4	46,7	53,5	46,5	52,2
Public expenditure <sup>5</sup>	56,3	56,3	54,2	56,8	53,3	55,2
Government deficit <sup>5</sup>						
Central government (national definition)	3,8	3,8	3,3	3,2	2,9	1,9
General government (EMU definition)	3,5	3,9	2,9	3,3	2,4	3,1
General government gross debt <sup>5</sup>	80,1	79,9	78,0	81,4	76,5	78,2

<sup>1</sup> According to first convergence programme.<sup>2</sup> According to Commission services.<sup>3</sup> Annual % change.<sup>4</sup> Percentage of total labour supply.<sup>5</sup> Percentage of GDP.<sup>6</sup> The difference in levels between A/O and R is caused by a different definition; only changes over time can be compared.

deficit targets were met, which was a remarkable performance given the economic downturn. In contrast to the original intentions, this favourable outcome was realized thanks to higher tax receipts and not because of lower government expenditure; particularly expenditure in the social security sector proved hard to reduce.

In contrast to the evolution of the central government deficit, the outcome of general government net borrowing and of general government gross debt was worse than hoped for. The less satisfactory evolution of net borrowing is explained by the use of certain one-off measures that are not included in the calculation of net borrowing, and by the cyclical deterioration

#### **Box 1: Differences between the national deficit concept and the EMU deficit and their relation to EMU debt**

The assessment of the budgetary situation in the Netherlands is often cumbersome and confusing because of the many different and often changing terms and definitions that are used for public deficit.

All definitions for domestic use are based on the balance to be financed by the State. The balance to be financed is calculated on a cash basis and takes account of current, capital and financial transactions. Over time, the various governments have applied numerous corrections to the balance to be financed to obtain a deficit concept that has more economic relevance, mainly by including off-budget operations and disregarding a number of one-off financial operations. The current government has introduced such a concept in last year's coalition agreement and another one, the balance to be financed corrected for incidental factors, in the 1995 budget.

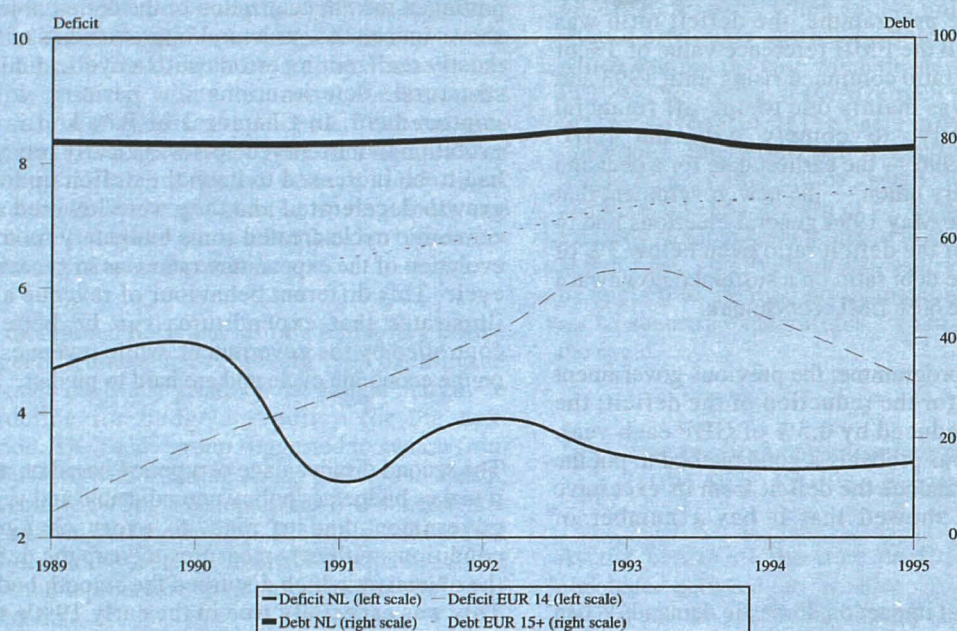
Obviously, such changing definitions cannot be used for international comparison of budget deficits. Therefore, to evaluate the deficit performance of the Member States during the preparatory phases of EMU, general government net borrowing was selected as a more stable standard deficit concept. The main differences with the balance to be financed by the State are:

- general government net borrowing covers the deficit of the total government sector: the central government, local authorities and the social security system;
- net borrowing excludes all financial transactions, such as privatization receipts and changes in the outstanding amount of housing and student loans;
- net borrowing is calculated on an accruals base instead of a cash base.

Graph 7b illustrates the diverging evolution of the balance to be financed by the State and general government net borrowing, resulting from these different definitions.

The general government gross debt concept was selected as the debt target for the EMU debt criterion. This debt definition mixes some of the characteristics of the two previously discussed deficit definitions. Similarly to the general government net borrowing, it covers the total government, but in analogy to the balance to be financed, it is calculated on a cash base and includes financial transactions.

GRAPH 15: General government deficit and debt (as a % of GDP)



of social security sector net borrowing. However, given the economic environment, a reduction of the general government deficit to only 3,3% of GDP in 1993 was not a bad result. Graph 15 shows that this result also compared favourably with the other Member States. While in 1989 the Dutch deficit was  $2\frac{1}{2}$  % of GDP higher than the EU average, it was  $1\frac{1}{2}$  % lower in 1994. Although the Dutch authorities managed to compensate the negative effects of the recession on the evolution of the deficit ratio with new measures, the effect of low nominal economic growth on the debt ratio was more dramatic: the ratio continued to rise to 81,4% of GDP in 1993, instead of the planned decrease. However, the mere stabilization of the debt ratio in the Netherlands was a significantly better result than the evolution of the average debt ratio of the European Union, which increased by 15% of GDP between 1991 and 1995.

In the course of 1993, the official view on the required pace of fiscal consolidation began to change. Because of the continued deterioration of the economic outlook, a continuation of the deficit reduction at the planned speed (approximately  $\frac{1}{2}$  % of GDP yearly) was judged to be inappropriate. Furthermore, in December 1992, the European Council in Edinburgh called for action by the Member States to promote the economic recovery in Europe, within the limited available budgetary margins. Consequently, the original target for the 1994 central government deficit was relaxed to a mere stabilization at the

1993 level. However, by the end of 1993, it became clear that, despite the economic downturn, the 1993 central government budget target would be easily met, due to significantly higher than expected tax receipts. But, because of the rapidly increasing unemployment and the overshooting of the targeted tax burden ceiling, the government was not inclined to allocate these additional revenues to faster deficit reduction. Therefore, in February 1994, it was decided to relieve the tax burden to promote employment, by reducing employers' social security contributions.

As a consequence of this loosening of the fiscal consolidation path, net borrowing stabilized in 1994 approximately at its 1993 level, which is higher than originally expected in the first convergence programme. However, at 1,9% of GDP, the central government deficit was considerably lower than the relaxed target of  $3\frac{1}{4}$  %. This strikingly divergent evolution of the central and general government deficits is mainly explained by different accounting rules for privatization receipts and cash-accrual differences.<sup>1</sup> Because of these privatization receipts and the early redemption of loans by the public building corporations to the Government, the debt ratio declined in 1994, to reach 78,2% of GDP.

<sup>1</sup> For more detail, see Box 1 in this chapter.



## 1.2. Towards a more structural budgetary policy

Despite the adverse economic circumstances during the period of the first convergence programme, the deficit ratio was reduced to a level close to the EMU reference value of 3% of GDP. However, the debt ratio continued rising until 1993 and the reduction in 1994 was mainly due to one-off financial operations. Consequently, to comply with the EMU convergence criteria by 1996 — the earliest date for a decision on the start of the monetary union — the new government that came into power after the May 1994 general elections had to continue the reduction of the deficit ratio even below 3% of GDP, to be able to put the debt ratio on a sustained downward path in the direction of the 60% EMU benchmark.

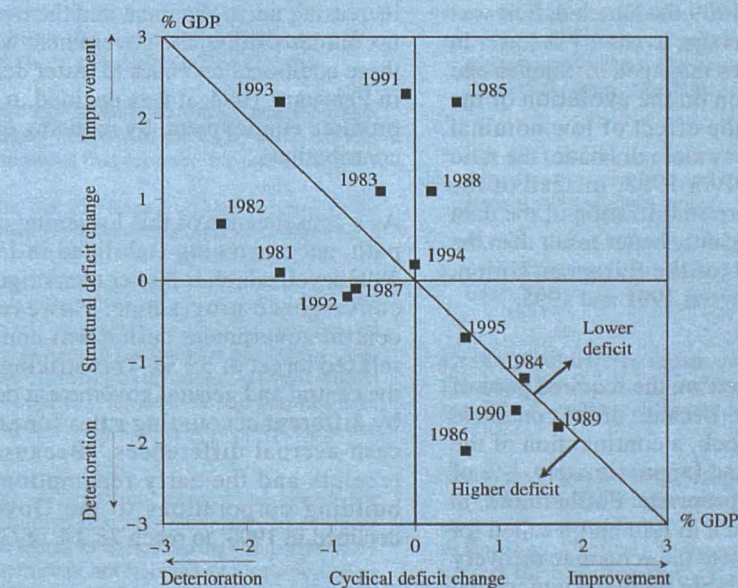
In the first convergence programme, the previous government had set out a time-path for the reduction of the deficit; the deficit ratio had to be reduced by 0,5% of GDP each year. Although this approach was probably a good method to put the emphasis on the need to reduce the deficit from its excessive level, experience also showed that it has a number of drawbacks.

Firstly, it has a procyclical impact on domestic demand. When economic growth is slowing down, the government has to take

additional restrictive measures to keep the deficit on the predetermined timepath, while it can take expansionary measures (e.g. tax reductions) during a recovery period without putting at risk the realization of the deficit objective. Graph 16 shows indeed that structural improvements of the deficit were mostly realized in periods with a cyclical deterioration and structural deteriorations in periods with a cyclical improvement. In Chapter 3 of Part I, it is noted that the evolution of current receipts was clearly procyclical; receipts had to be increased to keep the deficit under control when growth decelerated and they were lowered again when the economic cycle created some budgetary room. However, the evolution of the expenditure ratio was in general opposed to the cycle. This different behaviour of revenue and expenditure illustrates that expenditures can be better planned and controlled by the government, while revenues depend largely on the economic cycle and are hard to predict.

The second disadvantage of a policy based on a timepath is that it makes budgetary policy unpredictable and very unstable. The government had to react to every change in economic conditions with new measures to keep the deficit in line with the objective, which disturbed the smooth budgetary process. This was especially true in the early 1990s when economic growth was systematically overestimated in the original budget.

GRAPH 16: Structural and cyclical changes of the deficit



Source: Commission services.

Thirdly, the continuous attention of the government to realize its (domestic) deficit objective often led to the use of one-off measures and financial operations like privatizations. At the end of each year, there was also a complicated operation where some expenditures and revenues were shifted from one year to another to attain the desired deficit objective. These yearly shifts were merely cosmetic without economic substance and blurred the evolution of the fiscal stance. A final negative implication is that the composition of expenditure became distorted since expenditure categories that are under direct government control, such as public investment and consumption, were cut more than other harder to correct categories, such as social security outlays.

Because of the mentioned deficiencies of a budgetary policy based on a strict deficit timepath, in February 1993 the Minister of Finance requested the Study group on the budget margin<sup>1</sup> to propose a guideline for budgetary policy for the next government period. The Study group suggested to switch from a strict deficit objective with a ceiling on tax pressure to a more structural approach by setting a timepath for real expenditure combined with a ceiling on the deficit. The multi-annual real expenditure path should be set to be compatible with a cautious growth scenario and a predetermined envisaged evolution of tax pressure and deficit.

During the execution of this budget plan, economic growth will, in some years, be higher than in the cautious scenario, while other years will have a more negative performance. To prevent procyclical effects, revenues should be allowed to fluctuate with the economic cycle, while the initially planned tax cuts are further executed. However, the real expenditure ceiling should be scrupulously observed. As a consequence the deficit will also fluctuate with the cycle, but will continue to follow the underlying predetermined path. However, to avoid an extreme deficit evolution that would endanger the fulfilment of the EMU convergence criteria, the group on the budget margin also proposed to put a ceiling of less than 3% of GDP on the deficit ratio. If the economic cycle turned negative to such an extent that the deficit became higher than this ceiling, the structural budgetary policy would be replaced temporarily by a timepath policy again. This 3% ceiling also implies that the underlying 'structural' value for the deficit should be considerably lower (the Study group proposed a general government structural deficit of  $1\frac{1}{4}$  % of GDP), to allow sufficient room to let the automatic stabilizers play their role in a recession.

To prevent that such a new budgetary policy would endanger the necessary further deficit reduction to put the debt ratio on a sustainable downward trend, a few prerequisites should be observed. Firstly, when such a policy is started the deficit should obviously already be below the 3% of GDP ceiling, which was not the case when the new government was formed in 1994. Secondly, it is extremely important to start from a cautious scenario. If the basic growth assumptions are too optimistic, the deficit will reach its ceiling very fast, which would necessitate a policy switch. The Study group proposed an average yearly growth of  $1\frac{1}{4}$  %, which corresponded to the cautious medium-term scenario of the Central Planning Bureau at that time. Finally, such a structural budgetary policy should be applied to the total government sector, which implies that social security expenditures are not allowed to fluctuate with the cycle.

### 1.3. The second convergence programme (1995-98): An even-handed approach

At the centre of the new coalition agreement that was concluded between the socialist party (PvdA), the liberal party (VVD) and the social liberal party (D66) in August 1994 was a large-scale compromise on future budgetary policy. This compromise is also the central part of the new convergence programme for the period 1995-98 that was presented in October 1994 and examined by the Ecofin Council in December.

Following the proposal of the Study group on the budget margin, the government will no longer set targets for the central government deficit, but will observe a ceiling on its real expenditure. The planned reduction of real expenditure by, on average, 0.7% yearly is a considerable effort compared to the average increase of 1.7% in the period 1990-94. On the other hand, the agreement also contains a substantial package (1.5% of GDP) of tax and social security premiums reductions to promote employment. However, to ensure that the EMU deficit requirement is met, a slightly declining central government deficit ceiling has been set (from 3.3% of GDP in 1995 to 2.9% in 1998), which should result in a general government deficit of less than 3% of GDP from 1996 onwards.<sup>2</sup> This deficit path is compatible with the planned expenditure reductions and the envisaged tax cuts, in combination with a growth scenario of 2% average growth. Although this growth assumption is

<sup>1</sup> The Study group on the budget margin (Studiegroep Begrotingsruimte) is an advisory body with high-ranking public servants from different ministries, the Central Bank, the Central Planning Bureau and the Social and Cultural Planning Bureau.

<sup>2</sup> The figures for general government deficit in the convergence programme are no real targets or ceilings. The government commits itself only to respect a ceiling on the central government deficit, while the general government deficit is considered as a derived result. Although it is true that, on average, the general government deficit is highly influenced by the central government deficit, in some years there may be important differences because of financial operations or a different evolution of the deficit of the social security funds or the local authorities.

**Table 5****Convergence programme 1995-98: Base scenario**

	1995	1996	1997	1998	Average 1995-98
GDP growth	3,0	1,2	1,8	1,9	2,0
Real expenditure growth	-0,9	-1,8	0,3	-0,3	-0,7
Central government	-0,3	0,3	0,6	0,8	0,3
Social security	-2,1	-2,5	-0,9	-2,8	-2,1
Health care	:	-6,8	2,1	2,1	-0,7
Central government ceiling (% GDP)	3,3	3,3	3,0	2,9	
Estimated general government deficit (% GDP)	3,7	2 $\frac{3}{4}$	2 $\frac{1}{4}$	2	
Estimated general government gross debt (% GDP)	79,7	81	81	80 $\frac{1}{2}$	

Sources: Convergence programme 1995-98; 1995 Budget (Miljoenennota).

slightly more optimistic than the proposition of the Study group, it is certainly cautious given the current growth outlook.

A partial shift of priorities can be observed between the first and the second convergence programme. The first programme's main objective was to reduce the government deficit, which was to be realized by observing a timepath for the deficit. The stabilization of the collective tax burden was only a secondary restriction, which could not be realized because of the economic downturn. By contrast, in the new programme, the reduction of the deficit and of the collective burden receive equal attention: over the four-year coalition period, taxes will be cut by at least 1,5% of GDP, while the general government deficit will be reduced by approximately 2% of GDP.<sup>1</sup> This even-handed approach has become possible because of the successful reduction of the deficit during the first convergence programme. The tax reductions should promote employment and economic growth (see Chapter 2), which will facilitate further deficit reduction.

However, the planned deficit reduction could be insufficient to guarantee a continued reduction of the debt ratio. Indeed, in the base scenario, the debt ratio continues to rise until 1996, followed by only a slight decrease in 1998. This illustrates the difficulties the Netherlands faces to reduce its debt ratio in a substantial way. Because of low nominal economic growth, caused by the consistently low inflation rate, and the relatively low debt ratio compared to some other highly indebted Member States, the Netherlands cannot count on the erosion of the debt

ratio once the deficit ratio approaches 3% of GDP. Table 6 shows that the Netherlands would have to reduce permanently its deficit to only 1,3% of GDP to be able to reduce its debt ratio from the current level of approximately 80% of GDP to 60% over a 10-year period, if a nominal economic growth rate of 5% is assumed. Even with higher nominal growth, a permanent reduction of the deficit ratio to 3% would be insufficient to attain such a quick debt reduction. The solution to this problem is clearly not to increase nominal growth by generating inflation, since this would push up interest rate levels, which would generate higher interest payments on the government debt. Therefore, the only possibilities are to reduce the deficit further and to promote real economic growth.

Table 6 also illustrates that a reduction of the debt ratio by 20 percentage points is much easier to accomplish for countries with a high initial debt. For a country like Belgium with a debt ratio of around 140% of GDP, a deficit reduction to 4,2% of GDP is already sufficient to realize this goal when nominal economic growth is 5%. Of course the distance to cover for these countries to reach the 60% target is also bigger. However, Graph 17a shows that with an equal sustained deficit ratio, the initial debt ratio is in fact almost irrelevant for the moment when the target is reached. Therefore, it is apparently easier for highly indebted countries to realize fast debt reductions. However, an equal deficit ratio implies a lower primary deficit (or most probably a higher primary surplus) for highly indebted countries, since the interest charges that have to be paid on the higher debt are of course also higher. Consequently, the necessary cuts in primary expenditure will be significantly higher in countries with a high debt ratio; or stated differently, when less indebted countries would be willing to realize the same primary surplus as the heavily indebted countries, they would be able to bring down their debt ratio to the 60% of GDP threshold much faster (Graph 17b).

<sup>1</sup> When the second convergence programme was submitted, expected general government deficit for 1994 was 4,2% of GDP. Given an estimated deficit of 2% in 1998 (see Table 5), the planned reduction over the coalition period was 2,2% of GDP.



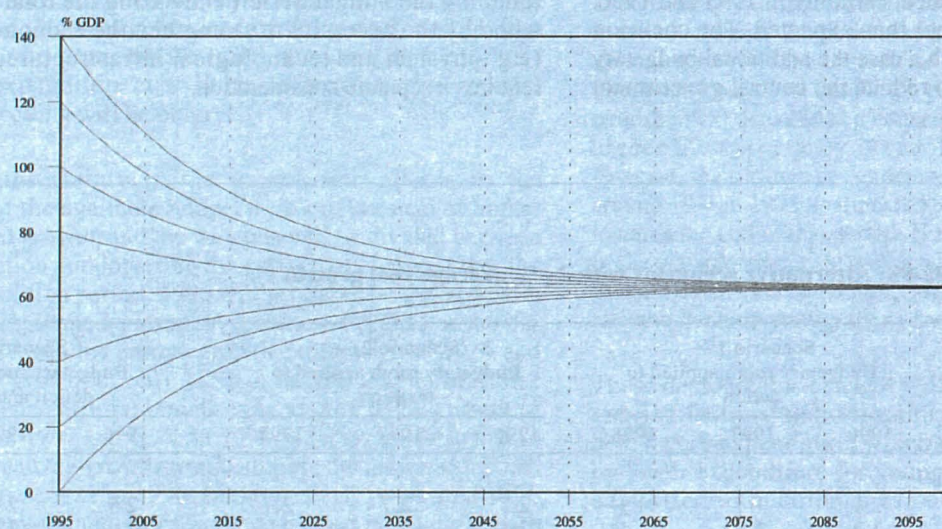
**Table 6**

**Deficit ratios that generate a reduction of the debt ratio by 20 percentage points over a 10-year period, for different combinations of the initial debt ratio and economic growth <sup>1</sup>**

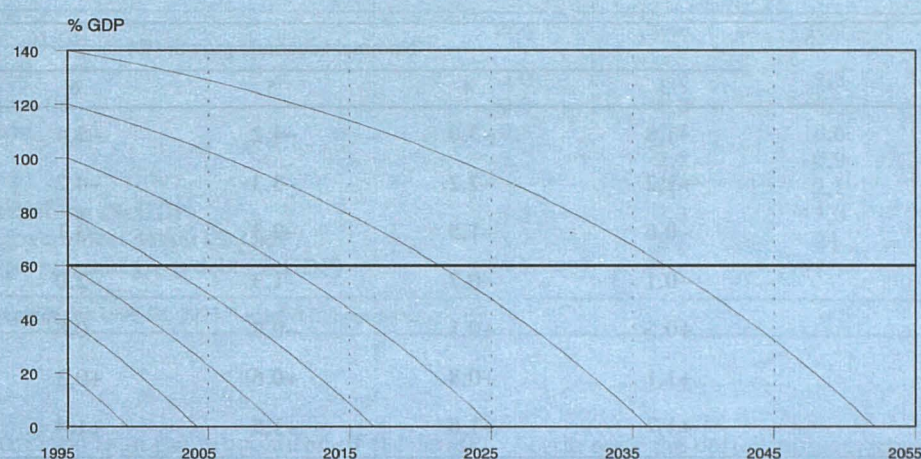
Initial debt ratio (%)	Nominal economic growth (%)				
	3	4	5	6	7
140	-1,8	-3,0	-4,2	-5,4	-6,5
120	-1,2	-2,2	-3,3	-4,2	-5,2
100	-0,6	-1,5	-2,3	-3,1	-3,9
80	-0,1	-0,7	-1,3	-2,0	-2,6
60	+0,5	+0,1	-0,4	-0,8	-1,3
40	+1,1	+0,8	+0,6	+0,3	+0,0
20	+1,7	+1,6	+1,5	+1,4	+1,4

<sup>1</sup> A minus sign indicates a deficit.

**GRAPH 17a: Evolution of the debt ratio for different initial values with 5% nominal economic growth and a deficit of 3% of GDP**



**GRAPH 17b: Evolution of the debt ratio for different initial values with 5% nominal economic growth, 8% interest rate and a primary surplus of 5% of GDP**



However, it would be somewhat unjust to judge the new policy intentions of the Dutch Government on the results of the base scenario. Since it is very probable that economic growth will be significantly higher than assumed, certainly in 1995 and 1996, the revenues will also be higher than expected. The coalition agreement specifies that in such a case the additional budgetary room will be allocated first to reduce the central government

deficit to 2,7% of GDP in 1998, which corresponds to a general government deficit of 1,9% of GDP. For the use of possible further growth windfalls, a choice will be made between further reducing the budget deficit and easing the total tax burden, whereby the necessity to strengthen the economic structure (e.g. physical and technological infrastructure, education) requires a separate consideration.

**Table 7**

**Convergence programme 1995-98: Alternative scenarios with 2  $\frac{3}{4}$  % average real growth <sup>1</sup>**

	Scenario 1 — Budgetary room applied to deficit			Scenario 2 — Budgetary room applied to taxation			Scenario 3 — Budgetary room applied to deficit and taxation		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
Government deficit									
Central government <sup>1</sup>	2 $\frac{1}{4}$	1 $\frac{3}{4}$	1 $\frac{1}{4}$	2,7	2,7	2,7	2 $\frac{1}{2}$	2 $\frac{1}{4}$	2
General government <sup>2</sup>	1 $\frac{3}{4}$	1	$\frac{1}{2}$	2	2	2	2	1 $\frac{1}{2}$	1 $\frac{1}{4}$
General government gross debt	78 $\frac{1}{4}$	76 $\frac{1}{2}$	74 $\frac{1}{2}$	78 $\frac{1}{2}$	77 $\frac{3}{4}$	77	78 $\frac{1}{2}$	77 $\frac{1}{4}$	75 $\frac{3}{4}$

<sup>1</sup> National definition.

<sup>2</sup> EMU definition.



Therefore, the convergence programme presents three different scenarios, based on a more optimistic average growth assumption of  $2\frac{3}{4}\%$ . Although this growth certainly seems realistic for the first two years of the coalition period, it could prove to be too optimistic for 1997 and 1998, given the current uncertainty about the further continuation of the present recovery. In the first scenario, the additional budgetary room is used completely to reduce the deficit. As a result, general government net borrowing falls to  $\frac{1}{2}\%$  of GDP in 1998 and the debt ratio shows a downward trend to  $74\frac{1}{2}\%$  of GDP. In the opposite scenario where the additional room is fully used to lower taxation, the deficit remains 1,9% of GDP,<sup>1</sup> while the debt ratio only drops to 77% of GDP. The third intermediate scenario divides the budgetary room on a fifty-fifty basis over deficit and taxation reduction and results in a general government deficit of  $1\frac{1}{4}\%$  and a debt ratio of  $75\frac{3}{4}\%$  in the final year. Consequently, in these optimistic scenarios the deficit would not exceed 1,9% of GDP from 1996 onwards and the desired downward trend of the debt ratio would start in the same year, irrespective of the chosen allocation of the additional budgetary room.

The success of the convergence programme to reduce the deficit and debt ratios will firstly depend upon the ability of the central government to follow strictly the planned path for real expenditure reduction. Although the coalition agreement contains detailed plans and figures by government department, some of these plans might prove to be hard to implement. The envisaged considerable cuts in education, defence and the public sector wage bill are some examples of savings that could be difficult to realize. There is also a danger that the far-reaching reform of the social security system might take more time than is currently envisaged or might be only partially implemented. However, because of the government's firm commitment to compensate unrealized savings by other additional expenditure cuts, it can be expected that the real expenditure ceiling will be observed.

A second uncertainty in the programme relates to the magnitude of the available budgetary room because of higher than expected growth, and the way this will be divided between deficit reduction and lowering the collective burden. Over the four-year coalition period, 1996 will probably be the year with the highest unplanned additional revenues, because of the big difference between the current growth expectation of  $2\frac{3}{4}\%$  and the assumed growth of only 1,2% in the base scenario. Since the convergence programme already assumed 3% growth in 1995, 1,8% in 1997 and 1,9% in 1998, it seems unlikely that in these years realized growth would surpass the assumed growth to the same extent as in 1996. In the recently published 1996 budget, the government has strictly continued the planned path of real expenditure reduction, as announced in the convergence programme. This policy will lead to a decline in real

expenditure by approximately 1% in 1996. According to government estimates, this decline creates room for a deficit reduction from 3,7% of GDP in 1995 to 2,8% in 1996, and a tax reduction by more than a half the percentage of GDP. The 1996 tax reduction will be financed by expenditure savings and additional (growth) revenues in the social security sector. The State budget savings and additional revenues will be used for deficit reduction.

The Dutch authorities expect that the debt ratio will decline moderately from 78,7% of GDP in 1995 to 78,4% in 1996. This slow reduction is mainly the effect of the low expected inflation, which reduces forecast nominal GDP growth to less than 4% in 1996. The concern about the slow pace of debt reduction is recognized in the 1996 budget, where it is stated that in 1997 further reduction of the deficit should be realized in order to induce the necessary decreasing trend in the debt ratio.

#### 1.4. Future pension obligations and the need for debt reduction

The reduction of the debt ratio is not only required to increase the sustainability of budgetary policy to be able to participate in the economic and monetary union. It is also essential to alleviate the pressure from interest charges on the budget in general and on other spending categories in particular. This internal crowding-out seriously limits the possibilities to engage or extend new policies, such as fighting unemployment and protecting the environment.

On a somewhat longer time scale, the debt ratio should also be lowered to create the necessary budgetary breathing space to be able to cope with the costs of an ageing population. As in most European countries, the Dutch population will be getting older over the next decades as a consequence of a lower birth rate and higher life expectancy. According to Eurostat's population forecast, the old-age dependency ratio<sup>2</sup> is expected to rise from around 19% in 1995 to almost 28% in 2020, with a faster increase towards the end of this period. However, Graph 18 illustrates that in the considered period the Dutch situation is less dramatic than in most other Member States, because of the relatively high birth rate and the high immigration of young people.

These demographic changes will have important effects on the public finance situation, mainly through higher pension and health care expenditure, which will not be fully compensated by lower expenditure for young people. A number of studies have tried to quantify these effects,<sup>3</sup> with varying results

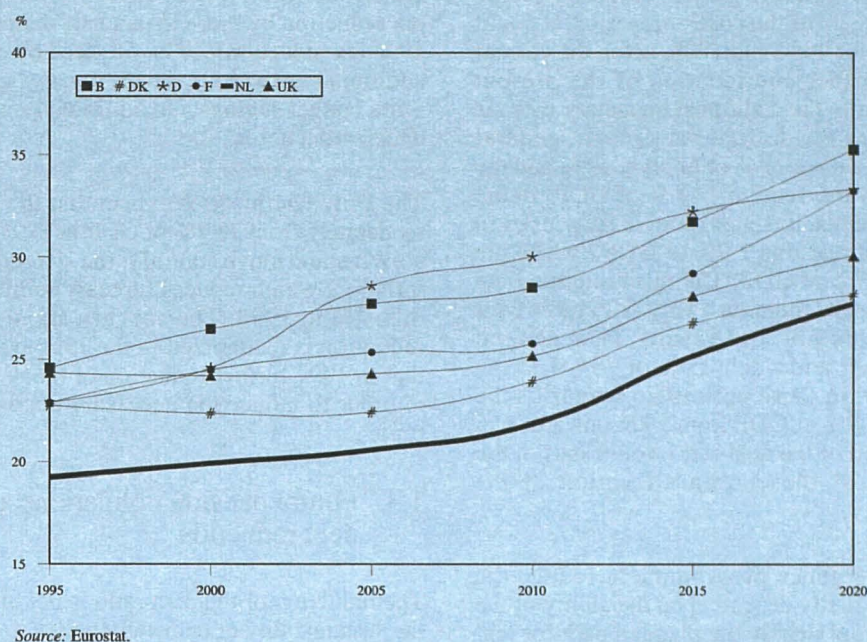
<sup>1</sup> Rounded to 2% in Table 7.

<sup>2</sup> This is the number of people who are over 65 years old, divided by the number of people at working age (15-64).

<sup>3</sup> For example Centraal Planbureau (1992), Wetenschappelijke Raad voor het Regeringsbeleid (1993).



GRAPH 18: Old-age dependency ratios



because of different time scales and different assumptions of economic growth, labour market participation and budgetary policy. However, they all agree that with an unchanged policy, the old-age expenditures will increase significantly.

How the additional costs of an ageing population will be covered depends on the financing system of the social security schemes concerned. In a 'pay-as-you-go' scheme, the active population contributes to pay the benefits for the part of the population that is inactive at that time. If the ratio of the number of active persons to the number of inactive persons declines, the contribution rate has to rise. Therefore, pay-as-you-go schemes necessarily generate intergenerational transfers. Although the height of the benefits in this scheme is normally adjusted to inflation and changes in the standard of living, benefit levels are clearly subject to (yet uncertain) government decisions. On the other hand, in a funded scheme everyone pays contributions during his or her active life to build up sufficient capital to finance their own future benefits. The main disadvantage of this scheme is that it has normally no protection against inflation and is not adjusted for possible changes in the standard of living.

Accumulation of assets apparently seems to give a higher certainty on the payment of future benefits than a pay-as-you-go system that is dependent upon the willingness of future

generations to pay the higher contributions. However, both systems merely put a claim on a part of the future production. If the production level is sufficient to guarantee both active and inactive persons the desired income, there will be no distributive problems, even not under a pay-as-you-go system. If however the future output level turns out to be insufficient, the distributive problem between generations will generate inflation. In general, the active part of the population will be able to better protect its income against inflation, which will generate a redistribution towards the active generation.<sup>1</sup>

The Dutch pension scheme consists of three layers: a tax-financed basic pension (AOW and AWW), a supplementary pension by sector, and individual pension contracts. The basic pension scheme guarantees a flat-rate pension, based on the minimum wage, to everyone who lives in the Netherlands, including people who never worked, and is a pay-as-you-go system. The benefit level in the supplementary occupational pension schemes is related to the final pay and covered by accumulated assets in pension funds, which are financed by contributions from employers and employees. In 1991, about two thirds of the total pension benefits was paid by the basic

<sup>1</sup> For a further elaboration, see De Kam (1992) and Kuné (1994).

### Box 2: The civil servants' pension fund ABP and the EMU debt criterion

Can the existence of the ABP (Algemeen Burgerlijk Pensioenfonds — General Civil Pension Fund), a funded scheme for the supplementary pensions of public servants, be considered a relevant factor when the evolution of the Dutch public debt ratio is discussed? The ABP covers the pensions of all public servants and is one of the largest pension funds in the world, with accumulated reserves amounting to HFL 177,2 bn in 1993, more than 30% of GDP. The Netherlands hold a relative unique position in this respect, since in most other European countries supplementary pensions of civil servants are not funded.

Consolidation of the ABP in the government accounts would reduce the government debt ratio by around 15% of GDP, since about 45% of the assets of the ABP is government related (see also Graph 7 in Annex 3). However, such a consolidation is not warranted since the ABP is classified in the insurance sector and not in the general government sector (national accounts definition). The independence of the management of the fund is currently being increased in a so-called 'privatization' operation. This does not involve a sale of assets, but merely implies that the role of the government in the ABP is further reduced to become the same as any other employer in a private sector pension fund. At the end of the privatisation operation, which should be finished on 1 January 1996, the ABP will be a private institution that has to comply with the same rules as other private sector pension funds and will be managed jointly by the government and the representatives of the civil servants. Consequently, the obligation for the Netherlands to put the debt ratio on a sustainable path in the direction of 60% of GDP as the EMU reference value remains, despite the existence of the ABP.

However, since the other uncovered future pension obligations are in line with those of other Member States, the existence of a funded supplementary pension scheme for civil servants could be considered in the evaluation of the downward trend of the debt ratio.

pension scheme, while occupational schemes accounted for 32% and the individual contracts for about 2%.<sup>1</sup> Given the continuing build-up of the second layer, the importance of the pay-as-you-go system will gradually reduce in the future.

Although the Dutch population is ageing slower than in most of the other Member States and despite the fact that a substantial part of future pension obligations is covered by pension funds, a study by Kuné et al. (1993) calculated that the Netherlands have the second largest uncovered basic pension liabilities in the EU, amounting to 137% of GDP in 1990 (only Luxembourg has slightly higher liabilities). The unfavourable Dutch position in this study results from a fairly high benefit level that is applied to the whole population, with or without working history. However, this study does not take into account that

other countries would also have to provide some income to people without a working history.<sup>2</sup> Furthermore, the tax claim on future pension benefits is also relatively high, which reduces the net cost of pensions. When the results of the study would be corrected for these two factors, the uncovered Dutch pension liabilities would be in line with results for other Member States. However, as in most of the Member States, the uncovered pension liabilities will pose a major redistributive problem for future generations. Therefore, in order not to burden future generations with additional difficulties, and to be able to meet its base pension commitments also in the next century, it is of crucial importance that the Netherlands reduces as fast as possible its debt ratio to a more sustainable level.

## Chapter 2. Promoting employment

Despite the relatively strong employment creation in the Netherlands, unemployment remains unacceptably high, certainly if other forms of non-employment such as high disability and early retirement are taken into account. Furthermore, for demographical reasons the unemployment outlook continues to be burdened by a relatively high labour supply growth, compared to other Member States. There is no single cause for the unemployment problem, but rather a range of explanations concerning both labour demand and labour supply. On the demand side, the main factor seems to be the high cost of labour, especially at the low end of the market. The high labour cost is heavily determined by the expensive social security system. All kinds of institutional rigidities such as high firing costs, short probation periods and limits on temporary contracts, also restrict the demand for labour. On the supply side, the generous social security system has reduced the financial incentives to work or to accept a job at a low wage, since the difference between the level of social benefits and the wage level became too small. Again, these negative effects are concentrated at the lower end of the labour market. Furthermore, since a number of social benefits and subsidies are income-related, the total average marginal tax pressure for this group has a very steep profile and is for a number of special cases even above 80%.<sup>3</sup>

Consequently, creating more jobs and fighting unemployment became the central theme of the coalition agreement of the current government. Firstly, the government wants to promote economic growth by improving the structure of the economy, increasing competition on the product markets and promoting entrepreneurship. This general policy will be supplemented by various measures to remove the abovementioned obstacles to

<sup>1</sup> Petersen and Eikelboom (1993).

<sup>2</sup> This correction is made in Herd and Van den Noord (1993) for the major OECD countries. However, this study does not treat the Netherlands.

<sup>3</sup> Huigen (1994).

employment creation. Four different fields of action can be distinguished: general reduction of labour costs, specific measures for the low end of the labour market, removing institutional rigidities and increasing incentives to work.

## 2.1. General reduction of the costs of labour

### 2.1.1. Wage moderation

From the early 1980s onwards, there has been a broad agreement in the Netherlands to limit wage increases to support employment growth. Despite the apparent success of wage moderation in the past (see Section 4.2 of Part I), this policy has been questioned frequently in recent years. One argument is that because of the continued policy of low wage growth, the Dutch economy will specialize more and more in activities with low value-added and relatively high labour content, while the Netherlands should specialize in high productivity, high technology jobs to exploit its competitive advantage of a highly educated population. However, until now, wage moderation did not have negative effects on productivity (expressed as GDP per working hour), which remains among the highest in the Union.

The low wage policy might also remove the incentives to rationalize the production process, invest in research and development and engage the necessary structural changes of the economy; it removes the symptoms of the disease, without curing the disease. Den Butter and Broersma (1993) concluded that wage moderation can be important to avoid or delay the destruction of existing jobs, but the creation of new jobs is mainly determined by investment and the flexibility of the labour supply.

The moderate wage evolution could also squeeze the available room for domestic consumption growth. However, this is compensated by higher exports because of the improvement of the competitive position and, in the long term, by higher growth as a consequence of the increased investment possibilities. Nevertheless, part of the competitive advantage can be lost again through an appreciation of the exchange rate as a consequence of the low wage cost development and the consequent weak inflation.

However, since wage moderation has clearly been one of the determining factors behind the favourable employment growth, the intention of the present government to continue it in the following years is a good choice,<sup>1</sup> certainly to preserve existing

employment. In 1995, the government induced workers to limit their wage demands by reducing the burden of taxes and social security premiums on labour income. These measures also supported disposable income and the private consumption level, and compensated for the previously mentioned possible negative effect of wage moderation on consumption. However, wage moderation is not the answer to all problems, and needs to be supplemented with more structural reforms.

### 2.1.2. Social security reform: Making the system less expensive

In the Dutch social security system, premium levels are set annually to cover for the expected expenditures and keep the system in equilibrium. Consequently, cost-reducing measures automatically decrease the contributions rates, assuming a constant government subsidy to the system. Therefore, making the social security system cheaper creates the possibility to lower the wage cost for employers by reducing their social security contributions, which should promote employment. In the years ahead, the government intends to use this direct form of wage cost reduction, instead of the more indirect way of promoting wage moderation through tax reductions for employees.

In trying to achieve a reduction of social security expenditure, the Dutch authorities are more concentrating on reducing the number of people in the system (mainly in the sickness and disability schemes) than on decreasing the level of the benefits. This choice is not only determined by political preferences, but also by the past negative experience in trying to reduce the benefit level in the 'disability' scheme (WAO). In 1993, after two years of discussions in the previous cabinet and just avoiding a breakdown of the coalition, it was agreed to make the benefits for new entrants into the system depend upon the number of years they had worked before becoming too disabled to work. However, in the collective wage agreements, almost all sectors decided to compensate this loss (mostly referred to as filling the WAO-hole) by private insurance. As a consequence, in the private sector the average WAO benefit only receded from 75 to 73%. Although the measure reduced the direct cost of the WAO, the benefit level did not drop significantly and as a result the effect on the number of disabled was negligible.

Nevertheless, some attempts to reduce the volume of benefit receivers also failed. The 'bonus-malus' system, which was introduced in 1992, tried to reduce the number of disabled by giving a subsidy (bonus) to employers who hired someone who was previously disabled, and by imposing a fine (malus) on employers when an employee became disabled. However, the 'bonus-malus' system proved to be hard to implement and because of a number of legal objections, the present government has decided to abandon the system. The

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<sup>1</sup> A modest wage development in the private sector has not only positive employment effects, but is also beneficial to the public finance situation, since it has a moderating influence on the wage evolution in the public sector.



government intends to replace the bonus part of the system by a number of incentives for the partially disabled to return to the labour market.

However, not all efforts of the previous government to reduce the number of disabled have been fruitless. A new more severe definition of the disability concept<sup>1</sup> has been introduced and is now clearly reducing the number of disabled. The application of the new definition has, together with other restrictive measures, diminished the number of new disabled in 1994 by some 15 000 persons. Furthermore, all currently disabled people, starting with the youngest, are gradually being screened against the new definition. As a consequence, 29% of the persons screened so far have lost all rights to a disability benefit, while the benefit is reduced for 18% of them.<sup>2</sup> People who have to leave the scheme can fall back on the unemployment insurance, which has a similar benefit level. However, contrary to the disability scheme, the unemployment insurance is limited in time.

The present government has also tightened the conditions to receive unemployment benefit. Besides higher requirements on the preliminary working period, it is no longer possible to enter the unemployment system after leaving a job on own initiative. The sanctioning system and the obligation to look for employment will also be tightened.

More fundamental changes are envisaged in the execution of the various social security schemes. The unemployment, disability and sickness schemes are administered under the responsibility of the sectoral insurance boards (*bedrijfsverenigingen*), which are jointly managed by unions and employers' organizations. In 1993, a parliamentary commission of inquiry (*Commissie Buurmeijer*) analysed and investigated the proper working of the sectoral insurance boards. Its conclusion was that the administration of the systems was mainly aimed at paying the benefits accurately and timely, but that little or no attention was paid to prevention, control and reintegration in the labour market, although this was clearly one of their tasks. New government regulations to reduce the number of benefit receivers were not fully implemented, since the insurance boards had no financial incentive to execute such policies. The control of the boards by the Social Insurance Council (*Sociale Verzekeringsraad*) was

also found to be insufficient, which is not surprising since the majority in the Council was held by the unions and the employers.

Therefore, a reorganization of the administration of the social security schemes is being implemented. To separate execution and control, the Social Insurance Council has been abolished and is replaced by a Supervisory Board for Social Insurance (*College van Toezicht Sociale Verzekeringen*), appointed by the government. In the future, the execution will be open to competition and organized by region, instead of by sector.

The sickness scheme, which guarantees payment of 70% of the wage during periods of sickness, will be abolished in 1996.<sup>3</sup> It will be replaced by an obligation for the employer to continue paying 70% of the wage for a maximum period of one year. The employer will be free to choose whether or not he will insure this risk. This measure is an extension of the successful introduction of an own risk period (two weeks for small firms and six weeks for firms with more than 15 employees) for employers in 1994. As a consequence, the sickness absence declined from 6,8% in 1993 to 5,7% in 1994. In an evaluation survey by the Supervisory Board for Social Insurance, 60% of the enterprises reported that this reduction was due to the introduction of the own risk period.

Furthermore, despite the unanimous objections of employers and unions in the SER,<sup>4</sup> the government has decided that, from 1996 onwards, the premium level will be linked to the disability risk of each sector, in order to motivate employers to create safer working conditions. Employers will also be given an opting-out possibility, which implies that they can decide to leave the current pay-as-you-go scheme and take out private insurance, which is based on capitalization, against future disability risks. Although the private insurance companies will have to maintain the same level and duration of the benefits, the authorities hope to reduce the operational costs by introducing competition and increasing incentives to prevent disability. However, the employer will continue to have to pay contributions to cover the payments of the existing pay-as-you-go system to people who are already disabled. Given this set-up, the SER judges that opting out will be too expensive for most firms, certainly if premium levels are sufficiently diversified in the pay-as-you-go system. However, for firms with a lower than average disability risk and a young labour force, it could be almost immediately profitable to leave the

<sup>1</sup> Since 1987, disability was defined as the inability to continue the work one was trained for, independent of the availability of such employment. Under the new definition someone is considered to be disabled if he or she is unable to take up any paid job, independent of the person's previous experience and training. If a person is found to be able to perform a certain job (this can be a very theoretical possibility such as bonzai grower) with a lower wage than the previous job, he or she is considered to be partially disabled to the extent of the income difference.

<sup>2</sup> *Commissie Toezicht Sociale Verzekeringen* (1995).

<sup>3</sup> The system will be maintained for people with short-term contracts, unemployed, maternity payments and in cases of bankruptcy of the employer.

<sup>4</sup> *Sociaal-Economische Raad* or Social Economic Council: an advisory board with representatives of employers and unions and some independent experts.

current system.<sup>1</sup> Since the firms with the lowest degree of disability will leave first, the average degree of disability for the remaining firms will rise, which will have to be financed by a higher premium. As a result, it will become interesting for other firms to opt out and eventually only the firms with a very elevated degree of disability will remain in the old system, paying very high premiums.

Consequently, the proposed organization of the disability scheme apparently has no stable situation where both the private sector and the existing system hold part of the market. Either the private sector is too expensive and everyone stays in the pay-as-you-go system or some firms opt out with the consequence that gradually everyone leaves the present system. In the first case, the whole reform would be useless, while in the second case the total immediate cost would be much higher than the present system because of the required capital accumulation for the new cases. However, the height of the premium is not the only factor for an employer to consider in choosing between the two systems; the quality, extensiveness and flexibility of the new services will also play a determining role. Therefore, the risk that everyone will stay in the present system seems to be limited. On the other hand, the possibility of a massive exit from the present pay-as-you-go system will be reduced by the introduction of a ceiling on the premium. Consequently, the (threat of) enhanced competition<sup>2</sup> could force the operators of the present system to increase their efficiency and reduce costs.

Besides the attempts to tackle the main problem areas of sickness and disability, the government also plans a number of savings in other parts of the social security system, like child allowances, social assistance and pensions. It is also decided that due to higher female labour market participation, the income scheme for widows and orphans (AWW) can be progressively phased out.

The commitment of the present government to attain its targeted expenditure cuts in the social security system is illustrated by the fact that in the summer of 1996 the effectiveness of all measures will be evaluated and reoriented if necessary.

## 2.2. Specific measures for the low end of the labour market

In Part I of this study, it was observed that long-term unemployment was mainly concentrated at the low end of the labour market. Hence, the government is supplementing the previously described measures to reduce the general wage cost, with more specific measures to create employment for this section of the labour market. Since such measures can be more accurately targeted at the problem areas, the overall cost can be lower than with general measures. As an example, a wage subsidy for the creation of a new job at a low wage can create jobs where they are most urgently needed at a lower cost than with a similar subsidy for all wage levels. However, because of the general lack of labour demand, people with higher qualifications might compete for these new low paid jobs with the less educated. Research has shown that in the 1980s the low paid jobs were filled mainly by people with a general education, while the number of low paid jobs for people with only basic education decreased.<sup>3</sup> To avoid this, employment opportunities at all levels need to be created by the general measures described previously.

The Dutch authorities have chosen to implement a number of general reductions of social security contributions in such a way that they favour mostly the creation of low paid jobs. Consequently, the danger that higher educated unemployed crowd out the lower educated from the newly created low paid jobs is reduced since the measure also applies to jobs that require a higher qualification. In 1995, employers' social security contributions for the health-care system were reduced by a fixed amount for every employee, which reduces the contribution rate most for the lowest wages. For 1996, the government originally planned, in its coalition agreement, a similar reduction of the compensatory allowance,<sup>4</sup> which is paid by employers to employees, accompanied by a compensating tax reduction for employees. However, it was finally decided to replace this measure by a straightforward reduction of the employers' contributions by HFL 1 100 (approximately ECU 500) yearly per employee. For employees who earn less than 115% of the statutory minimum wage, this amount is increased to HFL 2 000 (about ECU 950), which represents one third of the employers' contribution at this wage level.

A more direct measure of the government to generate additional employment for the long-term unemployed is the creation of 40 000 new jobs during this legislation in child care,

<sup>1</sup> Euverman (1995). When, in a sector, an important company defaults or has to reduce its labour force significantly, the same situation might arise. Since, in such a case, the disability cost from the sector would have to be divided over fewer remaining workers, the premium level would increase significantly and it would become interesting for some firms to opt out (Bekkering (1995)).

<sup>2</sup> It is not guaranteed that competition will lead to lower operation costs since the market will be divided over more operators and there will be less standardization.

<sup>3</sup> Bosch and Elsendoorn (1994).

<sup>4</sup> When, in 1992, a number of the employers' social contributions were replaced by direct taxes paid by employees, this was compensated by this allowance (overhevelingstoelag) from employers to employees.

health services, security and care for the elderly. This is an important increase compared to the approximately 130 000 people that were in various employment programmes in 1993. Although the cost of this additional employment creation will be mainly covered by the savings on social security benefits, this measure will probably result in permanently higher public employment expenditures. Furthermore, the creation of these subsidized jobs might prevent the creation of similar low-paid jobs in the private sector, which is one of the government's objectives. However, on the positive side, these jobs could fulfil existing needs and keep the unemployed in contact with the labour market.

There is a close relationship between long-term unemployment and a low education level. For example, in 1993, 55% of the unemployed with only primary education was unemployed for more than a year.<sup>1</sup> Although, in general, the level and quality of education in the Netherlands are high by international standards, vocational training could be improved.<sup>2</sup> Especially apprenticeships and adult vocational education should be extended. Therefore, the government is paying specific attention to vocational training and is trying to improve the link between education and the labour market by reducing the cost of apprenticeship programmes.

Although the legal minimum wage has been reduced (or not indexed as in 1995) on several occasions in recent years to approximately 60% of the average wage, it remains on the high side by international standards.<sup>3</sup> Since the labour market is characterized by an excess supply situation, a lowering of the minimum wage should generate employment in a competitive market. Therefore, the authorities are planning to allow temporary deviations of the minimum wage for specific sectors. Since the exemptions would only be valid for a limited time, the effect of this measure will probably remain limited. However, the minimum wage not only determines the base of the wage system, but is also important for a number of social security benefits, whose level is linked to the minimum wage. Therefore, the evolution of the statutory minimum wage has a significant impact on total social security expenditures, and consequently also on the premium level. Hence, a high minimum wage not only has a negative direct effect on the low end of the labour market, but also an indirect negative effect on all levels of employment.

For most sectors, the minimum wage is not the floor in the agreed wage scales. Collective wage agreements often set the lowest sectoral wage significantly above the statutory minimum wage (up to 30% above the minimum wage in the construction

sector). Since these agreements are declared legally binding for every company in the sector, the creation of jobs at a wage in the margin between the lowest sectoral wage scale and the minimum wage is prohibited. However, given the importance of this margin in several sectors, there exists significant room for job creation at the low end of the market without lowering the legal minimum wage. Therefore, the government has threatened to refuse to declare a collective wage agreement generally binding if it does not contain the possibility to create jobs at the minimum wage level. As a result of this announced policy change, some sectors decided already during the current round of wage negotiations to create a new lower wage scale, although only for a limited time.

The possibility to create additional jobs at the low end of the wage scale will also increase wage differentiation, which is often hampered by institutional rigidities in the labour market. Too often, wages do not adequately reflect labour productivity, especially at the low end of the market. In the middle and upper segment of the labour market, wages should develop according to the market situation in these segments, which should result, on average, in a macroeconomic moderate wage development.

### 2.3. Removing institutional rigidities

The Netherlands has traditionally had an economy with a high level of regulation, both in goods and services markets and in the labour market. The existence of excessive regulation in product markets often limits competition and obstructs the entry of new firms and the creation of new products or services. As is shown in Annex 1, this lack of dynamism can have important negative consequences on the growth potential of an economy and limit the available employment. Therefore, the measures to intensify competition, described in the Annex, can have important, although hard to quantify, positive effects on employment.

A reduction of the labour market regulation can obviously also have beneficial effects on employment. The Netherlands have a high degree of employment protection that can be detrimental to the creation of new jobs. Dismissal is, for example, very difficult and time-consuming since a preliminary approval by the regional public employment service is required. Clearly, high dismissal costs reduce the willingness of employers to engage new employees.<sup>4</sup> Hence, plans existed to replace the preceding permission rule by a system where the employee could appeal to a court in case of unjustified dismissal. Although similar dismissal rules exist in most other Member

<sup>1</sup> Ministerie van Sociale Zaken en Werkgelegenheid (1994a).

<sup>2</sup> Centraal Planbureau (1993).

<sup>3</sup> Ministerie van Sociale Zaken en Werkgelegenheid (1994b). However, the legal minimum wage is significantly lower for young people (below 23 years).

<sup>4</sup> On the other hand, high dismissal costs reduce the chance for dismissal, once someone is hired. This labour hoarding effect can probably explain why unemployment started increasing later during the 1993 economic downturn. However, once it started increasing, it increased much faster than in other Member States.



States, the unions and the small and medium-sized employers organizations opposed it. Therefore, the government decided to maintain the current system. Instead, dismissal periods will be shortened, procedures simplified, and the possibilities for appeal to the court, which is now mostly used for extending the dismissal period, reduced.

Other institutional rigidities put limits on the flexibility to hire people. There are, for example, only very short-term possibilities to engage people on a trial period and the use of short-term contracts is also limited. This makes the decision to hire someone a long-term commitment, certainly if the possibilities for dismissal are also limited, and could make employers hesitant to create new jobs.

The law on the flexibility of working hours is currently under discussion. More possibilities to work in shifts could increase the use and the productivity of the capital structure significantly. Allowing more flexibility in the number of hours worked per day or per week could also improve productivity in sectors with seasonal production patterns.

However, other labour market rules are more flexible than in other Member States. The legislation on temporary work is very flexible and, as a consequence, the share of temporary workers in total employment is the highest in the Union. Also, the regulations on part-time work are not very stringent; there is even no legal obligation to pay the same hourly wage for a part-time worker as for a full-time worker.<sup>1</sup> This resulted in a very high share of part-time labour, mainly for women and on the low end of the labour market. Research has shown that in the Netherlands this high degree of part-time work corresponds to the wishes of the workers. Only 8% of working men and 10% of working women would like to work more hours, while 13% of the men and almost 15% of the women would prefer to work even fewer hours than they currently do.<sup>2</sup>

Although too much flexibility in the labour market can also have negative effects, for example on the willingness of employers to provide on-the-job training, the previous examples show that in the areas where Dutch legislation is flexible, the labour market reacts very positively. Therefore, existing protective labour market regulation should be reconsidered carefully to avoid all disincentives to employment creation.

## 2.4. Social security reform: Increasing incentives to work

Besides its effect on labour demand (see Section 2.1.2 in this part), the generous social security system also has a negative influence on labour supply. A person will not be prepared to accept a job if the income distance between the received social security benefit and the wage associated with this job is too small. In the Netherlands, the minimum benefit for families with only one income is currently as high as 98,4% of the legal minimum wage, and before 1982 it was even more than 100%.<sup>3</sup> Again, this effect clearly plays predominantly on the low side of the labour market. This situation is intensified further by the fact that most jobs created in this sector of the labour market are part-time jobs, which in general yield a lower wage. Therefore, the social security benefit will almost always be competitive with the wage that can be earned from such an employment. Although the current labour market situation is probably more determined by a lack of demand than by a lack of supply, measures to promote the labour supply should not be neglected. Firstly, there might be some sectors where demand limitations are lower than on the aggregate level, which would be visualized by a higher number of unfilled vacancies. In these sectors the promotion of labour supply could have effective results and generate employment. Secondly, if more people are prepared to enter the labour market, this will have a depressing effect on the general wage evolution, which is also beneficial to employment.

There are two possibilities to increase the income distance between (low) wages and social security benefits to promote labour supply: increase the (net) wages or reduce the benefit level.

Increasing net wages can be done in several ways. In the past years, the previous government has increased, on a number of occasions, the tax deduction for labour-related expenses (*arbeidskostenforfait*). Since this tax deduction only applies to people with a job, this measure can increase the motivation to enter the labour market. The same effect can be obtained by reducing the social security contributions of employees. However, in 1995, the government attained this as a side-effect of the chosen measure to reduce employers' contributions for the health insurance (see also Section 2.2 of this part of the study). Since in the Netherlands this employers' contribution is part of the gross taxable wage of employees, its reduction also reduces the taxes to be paid by employees and increases their net wage.

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<sup>1</sup> However, such a requirement is part of most of the collective labour agreements.

<sup>2</sup> Praat and Vosse (1993).

<sup>3</sup> Centraal Planbureau (1995).

A more directly visual way to increase the gap between social security benefits and the lowest wages is the reduction of the level of the benefits. As mentioned earlier, the present government is paying more attention to the reduction of the number of people who receive benefit than to the level of it. However, in 1995, all benefits were frozen at their 1994 level, which implies a reduction of the real benefit level. Furthermore, the coalition agreement decided that in the following years of the legislation period the benefit levels would on average be increased by only half of the wage evolution. Nevertheless, during the preparation of the 1996 budget it was decided to link the benefits fully to the wage evolution in that year in order to limit the loss in purchasing power of benefit receivers. This decision is clearly contrary to the realization of a bigger gap between benefit levels and wages. So far, it is not clear if this implies a change in policy or if the government intends to freeze the benefit level again in a later year to arrive at the planned average half link.

## 2.5. The Dutch employment measures compared to the recommendations of the Commission's White Paper

With the publication of the White Paper on growth, competitiveness and employment in 1994, the European Commission pointed out the need to generate more employment by increasing the employment content of growth. To achieve this, a number of priorities for action were identified: lifelong education and training, greater flexibility, more focus on decentralized actions, reduction of the relative cost of low-qualified work, a more active employment policy and, finally, efforts to create jobs to meet new needs.

In the follow-up to the White Paper, the European Council in Essen in December 1994 identified five key areas where measures are required. In Table 8, these recommendations are

**Table 8**

**Comparison of the recommended labour market policies by the 1994 Essen European Council and the Dutch measures**

European Council recommendations		Dutch measures <sup>1</sup>	
1.	Improving vocational training	2.2	More apprenticeships, improved link between education and labour market
2.	Increasing employment-intensiveness of growth by:	2.3	Removing institutional rigidities
	a. more flexible work organization	2.1.1	Wage moderation
	b. wage agreements below increases in productivity	2.2	Creation of new public sector jobs in social services and security
	c. local initiatives to create jobs to satisfy new needs (environment, social services)	2.1.2	Social security reform in order to reduce social security contribution rates
3.	Reducing non-wage labour costs		
4.	Improving the effectiveness of labour market policy by	2.4	Social security reform to increase incentives to work
	a. avoiding practices and measures that remove incentives for the individual to seek employment		
	b. moving from a passive to an active labour market policy		
5.	Improving measures to help groups which are particularly hard hit by unemployment (young people, long-term unemployed, etc.)	2.2	Specific measures for the low end of the labour market

<sup>1</sup> The numbers refer to sections of this chapter of the study.

contrasted with the measures discussed in this chapter. This comparison shows that the current Dutch employment policy covers a broad range of action fields and gives the necessary attention to both demand, supply and structural measures. However, the labour market policy remains mainly characterized by income support measures, and less by active employment creation policies.

### Chapter 3. Generating more dynamic and competitive behaviour in product markets

Despite the openness to international competition, important parts of the Dutch economy have traditionally been characterized by collusive behaviour and high barriers to entry.<sup>1</sup> Dutch regulation is often very permissive towards collusive cooperation agreements. Contrary to European competition legislation, collusive behaviour was permitted in the Netherlands, as long as it had no harmful effects. On a number of occasions this has led to an investigation by the European Commission, resulting in required modifications or a condemnation of cooperation agreements. Although Dutch companies play a very active part in mergers and acquisitions, Dutch authorities also have no real power to oppose mergers or acquisitions that would generate a dominant position on the market for one firm. Furthermore, a web of regulations protects existing businesses from new entrants. Although the original aim of most of these regulations was not to restrict competition, it was very often the (undesired) result. Examples are the zoning regulation, the Business Establishment Act and the Law on shopping hours. These regulations are further supplemented by an important degree of tolerated self-regulation by professional organizations. Furthermore, the government intervenes, directly or through subsidies, in a number of important sectors, with the housing sector as the most prominent example.

Microeconomic rigidities and a lack of competition normally lead to inefficient allocation of resources, higher prices and a suboptimal output level. However, it is hard to detect these effects on a macroeconomic level in the Netherlands, since economic growth has been reasonably good and inflation was among the lowest in Europe. However, it remains possible that the negative effect of too little competitive behaviour was compensated by other positive evolutions in the Dutch economy. Van Sinderen et al. (1994) calculated that the average yearly growth of production in the Netherlands in the period 1984-90 could have been 0.5 percentage point higher if product markets had been more flexible. Furthermore, even if the positive macroeconomic effects of increasing the level of competition and reducing excessive regulation were limited,

the beneficial effects on the quality of products and services, by offering more choice and flexibility, would be considerable.

As a consequence, since the late 1980s, the awareness of the possible costs of insufficient competitive behaviour has grown considerably in the Netherlands. Therefore, a number of legal initiatives to remedy this situation have already been taken and some others are currently in preparation.

Competition policy is gradually, but fundamentally, being changed in recent years. The government is trying to find a new balance between preventing restrictive practices on the one hand and protecting and stimulating productive forms of cooperation, such as alliances for research and development on the other hand. Therefore, a completely new law on economic competition that will be based on European competition rules is planned. However, since this might take some time (January 1997 at the earliest), the Dutch authorities decided to take some quick corrective measures. Starting from July 1993, a ban on horizontal price agreements<sup>2</sup> was introduced. Exceptions are made for price agreements in franchising contracts, for joint short-term advertising actions and between branches of the same firm. Other exemptions can be granted to firms who can prove that a price agreement is of general interest. However, exemptions are only granted in very exceptional cases since the general interest requirement is strictly interpreted according to the criteria of the EC Treaty. This is a clear change from the system where all price agreements are allowed unless an abuse can be proven, to a system where agreements are in principle forbidden unless proof is given that they are beneficial. Since June 1994, market sharing arrangements and collusive tendering are also forbidden. The existing Economic Competition Act has also been amended and is now also applicable to informal collusive agreements and covers all liberal professions.

The present restrictive Business Establishment Act also comes under pressure from EU regulations since anyone who is allowed to establish a firm in another Member State and has sufficient experience is now automatically allowed to establish the same type of enterprise in the Netherlands. As a consequence, the establishment requirements in the Netherlands are often more stringent for Dutch citizens than for inhabitants of other EU countries. To remove this discrimination, to reduce market segmentation and to increase flexibility, the process to review the present Business Establishment Act was started back in 1988, but because of negative reactions by the branch organizations to a first proposal, it will only be replaced in 1996. The current proposal

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<sup>1</sup> A more detailed overview of the existing situation can be found in Annex 1, together with an assessment of the economic costs of a lack of competition.

<sup>2</sup> These are price agreements between members of the same sector or profession. Vertical price agreements, where suppliers impose a selling price on retailers, were already banned in 1964.



lowers the legal barriers to entry considerably and divides branches into three categories. For the first category there will no longer be legal entrance requirements. For the second group, which will include bakeries and butchers, sufficient general business skills will be needed; and for the third group additional specific business skills will also be demanded. Establishment permissions will in principle be valid for all branches of a same group, with the exception of some clusters of branches in the third group, such as the car cluster.

Although the barriers to entry will not disappear completely — about 70% of the existing small and medium-sized firms regulated under the present Law will continue to need a licence — the new law will simplify entry conditions significantly. Research shows that the proposed relaxation will lead to more dynamism in the retail trade.<sup>1</sup> The number of businesses will increase, entries and withdrawals will go up and profit adjustments progress more swiftly.

After long discussions in the 1980s, the Law on shopping hours was relaxed slightly in 1993. The maximum number of opening hours per week a store is allowed was increased from 52 to 55; and the latest closing time was extended from 6.00 to 6.30 p.m. on weekdays and from 5.00 to 6.00 p.m. on Saturdays. At the same time, a number of experiments with non-standard opening hours were approved in about 15 towns. However, these cosmetic changes have not stopped consumers' demands for more flexible shopping hours. Recently, a number of studies have also been conducted to investigate the economic effects of longer shopping hours.<sup>2</sup> Although there is some disagreement on the extent of the effects, most studies agree that prices could fall slightly, while there might be a small increase in sales volume and positive employment consequences. Therefore, the government has recently submitted a proposal to further liberate shopping hours. On weekdays and Saturdays, shops would be allowed to stay open between 6.00 a.m. and 10.00 p.m., unless the municipality where the shop is located decides otherwise. On Sundays the opposite rule would apply: in principle shops should stay closed unless the municipality allows them to be open. If this proposal is accepted by Parliament, the Netherlands would have a Law on shopping hours that is generally in line with practices in other Member States.

Direct government intervention in some sectors is also being reduced. In the housing sector, for example, the legal rent increase has constantly been set higher than inflation.<sup>3</sup> This

year, the subsidies to public building corporations will also be abolished in a large financial operation that will redress the balance sheet of the corporations to enable them to work under competitive market conditions in the future.<sup>4</sup> For an important number of households, these policy changes make buying a house more attractive than renting. As a consequence, the proportion of houses bought among newly constructed houses has risen from 5% in 1982 to more than 40% in 1990. The government is also reducing its direct intervention in the telecommunications sector (partial privatization of postal and telecommunications service, second telecommunications operator) and public transportation (other railway operators will be able to use the existing infrastructure, private exploitation of local and regional public transport).

At the end of 1994, the government also presented a plan to promote efficient markets, deregulation and the quality of law. The objective of this plan is to limit regulations and the administrative burden for businesses to a minimum, to strengthen competition, and to improve the quality of legislation and regulations. The whole operation is politically guided by a special Ministerial Commission, which is chaired by the Prime Minister. Working groups, consisting of experts with policy or practical experience, will be created to investigate specific problem areas and to make firm reform proposals, upon which the cabinet will decide. Each year, a number of specific subjects will be treated and decided. The subjects will be proposed by employers' organizations, trade unions, consumer organizations, external experts and government departments. This year, attention will be going to the monopoly of lawyers to provide legal advice, the (already mentioned) review of the Law on shopping hours, the removal of limitations on competition in the taxi sector, and simplification of some environmental and labour market regulations.

Hence, the process of reducing harmful regulation is clearly underway. However, it should be speeded up and intensified; too often, organizations who defend vested interests continue to be able to slow down or weaken the reform (examples are the 1993 minor change of the Law on shopping hours and the slow progress in the reform of the Business Establishment Act).

## Conclusions

Despite the sharp recession in Europe, there have been a number of positive developments in the Netherlands since 1992, when the Commission published the previous country

<sup>1</sup> Carree et al. (1993).

<sup>2</sup> Kremers et al. (1994), Depla (1994), Nooteboom (1994), Gradus and Kremers (1994), Gianotten and Heeres (1995a), Centraal Planbureau (1995), Bernardt et al. (1995), Gianotten and Heeres (1995b), Kremers and Gradus (1995).

<sup>3</sup> Dieleman and Everaers (1994).

<sup>4</sup> The main principle of this financial operation is that the government will pay an amount that is equal to the present value of all future subsidies, while the corporations will redeem all the outstanding housing loans to the government (see also footnote 1 on p. 14 of Part I).

study. Economic growth was less affected by the recession than in most of the other Member States because of the trade specialization pattern, the decline of the savings ratio and continuing wage moderation. After a mild recession the recovery, driven initially by external demand and then by investment, came faster than expected. The disciplinary effect of the Dutch guilder's peg with the Deutschmark kept inflation and interest rate differentials relative to Germany negligible. In contrast to most other Member States, the Dutch authorities managed to reduce further the general government deficit ratio during the economic downturn, although at a slower pace than originally planned. The deficit ratio is now coming closer to the 3% of GDP reference value and will probably be below it in 1996. However, the debt ratio will probably show a modest decline in that year. Employment growth has been stronger than in other Member States despite low economic growth, as the employment intensity of growth remained high.

However, the two major problems — the low labour market participation rate and the poor public finances — which were identified in the previous country study on the Netherlands, persist. The problems are closely linked by the social security system, where the high inactivity ratio increases the cost of the system and makes the fiscal consolidation more difficult. Furthermore, high contribution rates are needed to finance the social security expenditures which increases wage costs and is harmful to employment.

Although the general government deficit has been reduced significantly over the past decade, a further reduction is required to put the debt ratio on a sustained downward path towards the 60% of GDP reference value. Because of low nominal economic growth, together with low inflation, and relatively low debt compared to other highly indebted Member States, the further erosion of the GDP-debt ratio progresses only slowly once the deficit approaches 3% of GDP. The further reduction of the debt ratio is not only required to participate in the monetary union, but also to lower the interest burden and to allow pension commitments to be met in the next century. For this to happen, the planned expenditure cuts, as they are described in the second convergence programme, have to be fully realized, and in addition the extra budgetary room from higher-than-planned growth must be used to a significant degree to lower the budget deficit further.

Compared to European standards, the Dutch labour market situation is largely determined by the high growth in population and labour supply. As a result, the relatively high employment creation is mainly absorbed by new entrants to the labour market. Although the unemployment rate remains significantly below the Union average, it increased rapidly during the economic slowdown. In the current recovery, employment is recovering swiftly with an expected growth of 1.9% in 1996. However, with a continuous high labour supply growth,

unemployment is declining only marginally, which is partly generated by the declining trend in the number of social security beneficiaries since 1994. As a consequence, the participation rate in the labour market (in full-time equivalents) is on an increasing trend, although it still remains among the lowest in the EU, with high rates of disability, early retirement and part-time working.

There is no single explanation for the labour market problems in the Dutch economy, but rather a range covering both labour demand and labour supply. Labour demand appears to be restrained by the high labour costs, especially on the low end of the market, and by a number of institutional rigidities. The high labour cost is due in part to the expensive social security system, which also reduces, on the supply side, the incentives to work or to accept a job at a low wage. The government is taking a variety of measures to tackle the main obstacles to employment creation. Firstly, the cost of labour is being reduced through wage moderation and reductions of employers' social security contributions, which are made possible by cost-reducing institutional changes in the social security system (e.g. the introduction of competition elements in the disability scheme, the privatization of the sickness scheme). Secondly, the problems at the low end of the labour market will be tackled through specific reductions of the social security contributions, improved vocational training, and the possibility to create jobs at minimum wage level or even lower. Thirdly, institutional rigidities will be removed to facilitate jobs creation and encourage a more flexible labour market. Finally, the government will increase the incentives to work at low wages. Despite the policies addressing demand, supply and structural issues, the labour market policy continues to be characterized by income support measures, and to a lesser extent by active employment creation policies. To tackle the main obstacles to employment creation, it is important that the mentioned measures are implemented soon and that they are supplemented by additional measures.

To improve the general structure and dynamism of the economy, the government is also working on a number of legislative reforms to increase competitive behaviour and remove unnecessary regulations on the product markets. Competition policy is gradually, but fundamentally, being enhanced, the Business Establishment Act has been changed, and the Law on shopping hours has been approved by the government. Furthermore, a plan has been presented to promote efficient markets, deregulation and the quality of law. The process of reducing harmful regulation is clearly underway, but it could be speeded up and intensified. Increasing the level of competition and reducing excessive regulation will not only have positive effects on growth and employment, it will above all increase the quality of products and services, by offering more choice and flexibility.

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## **Annexes**





# Annex 1. Competition policy and regulation<sup>1</sup>

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<sup>1</sup> This Annex was prepared by B. Naudts of the National Economies Directorate, F. Caballero Sanz of the Economic Service Directorate on the basis of preparatory work by Hanneke Schuiling (Dutch Ministry of Finance) when on secondment to DG II.

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## 1. Introduction

The performance of any given economy depends both on the macro- and microeconomic conditions that define the economic environment where economic agents interact. At the microeconomic level, the good performance of markets is important to improve the competitiveness of firms, to avoid rigidities impeding markets from clearing under smooth and continuous conditions and to enable consumers to pay prices leading to an efficient allocation of resources among producers. In that sense, microeconomic policies aiming at eliminating market imperfections, burdensome regulations and other rigidities in commodities, inputs and services markets play a key role in ensuring a good performance of the economy.

The Dutch economy has traditionally been considered as one of the most open economies in Europe. Open exposure to competitors from other EU Member States and from the rest of the world has maintained effective competition in markets for tradable commodities. However, a substantial part of the Dutch economy has been strongly protected from foreign competition, even from other Member States. That has been the case for services sectors, professional activities and in general other activities requiring some sort of licence and some types of public procurement and publicly regulated markets. This has been widely considered as one of the traditional characteristics of the Dutch economy. For instance, the 1993 OECD Economic Survey of the Netherlands stated that: 'In the Netherlands, restrictions on competition have been rooted in cartelization, widespread barriers to entry imposed by official rules or by professional associations, as well as in government controls over various sectors in the form of subsidies, administered prices and public ownership.' (p. 58).

Already in the 1980s the Dutch Government expressed dissatisfaction with this state of affairs resulting sometimes in borderline cases as far as the legality established by the competition rules of the Treaty was concerned. The process of economic integration brought about by the internal market has opened to competition some economic sectors affected by those regulations and rigidities. Public procurement and newly liberalized services sectors are examples of these changes. This new trend has spurred the internal initiatives for the liberalization of those sectors of the Dutch economy and for the alignment of national competition rules with EU rules. Some recent competition cases at European level have also contributed to these changes.

The purpose of this Annex is to provide an overview of the present situation of different aspects related to the working of competition and regulation in the Netherlands and to review possible economic consequences. The next section gives some prototypical examples of competition cases affecting Dutch companies dealt with at European level. The section also

includes quantitative accounts of mergers and other concentrative activities and State aid in the Netherlands. Furthermore, some comments about regulation in the Netherlands are included. The last section in this Annex describes possible economic costs of a lack of competition. Recent policy measures and proposals made by Dutch authorities concerning competition and regulation are summarized in Chapter 3 of Part II of this study.

## 2. Overview of existing situation

### 2.1. Competition policy

As many other small countries, the Dutch economy has traditionally been more prone to solve economic problems by means of cooperative arrangements and self-regulatory solutions rather than by means of competition or the market mechanism. Quite often, these cooperative solutions have involved the conclusion of agreements within professional associations or groups of producers or services providers. In certain cases, this has resulted in non-exemptable restrictions of competition under Article 85 of the EC Treaty. However, this has not always been the case and quite a few types of agreements between undertakings have been cleared by the Commission as compatible with competition policy.

Below, the summaries of two recent cases are presented as examples of what has and has not been considered by the Commission — and also by the Court of First Instance — compatible or not with European competition law.

#### **Example 1: The building and construction industry in the Netherlands (1992)**

Since 1980, the Dutch Association of Cooperative Price-regulating Organizations in the Construction Industry (SPO) has established and enforced a comprehensive set of regulations aiming at coordinating the behaviour of builders tendering for public and private construction contracts. In all, 4 000 Dutch building contractors from 28 professional associations were bound by these agreements. Another 3 000 builders, among which 150 companies based outside the Netherlands, also occasionally followed the rules imposed by the SPO on an occasional basis.

Basically, the agreement consisted of two parts: the price-regulating rules and the code of honour. The former is a complex set of rules making the client effectively responsible to bear the tendering costs incurred by the contractors and leading to the designation between them of the lowest competitive tenderer, the so-called 'entitled undertaking'. This contractor was then protected from competition in different ways. The system was based on pre-tender meetings between



builders tendering for contracts. At those meetings, information on costs was exchanged between participants. In the presence of competition from non-members, the system allowed for a collective defence against outsiders. Furthermore, the bid of the entitled contractor was increased to cover the tender costs incurred by the unsuccessful contractors.

The code of honour established penalties for breaches of regulations and an internal system of arbitration to solve disputes between members.

In a decision made in February 1992 (OJ L 92, 7.4.1992), the Commission adopted a decision condemning this agreement and fining the associations involved a total of ECU 22,5 million. In the decision, the agreement was found to restrict competition in two different ways. Firstly, it restricted the client's freedom to choose among bidders as competing bids were not independent due to the information exchange between contractors. Moreover, the agreement restricted competition among members and non-members to the agreement, as outside competitors had to face a collusive response from SPO members.

This decision was appealed but the Court of First Instance (CFI) has recently upheld the Commission's decision. Among other things,<sup>1</sup> the appeal was based on SPO's request for an exemption according to Article 85(3). SPO claimed that the rules were introduced in order to compensate for the imbalances borne by the sector due to the cyclical fluctuations of the sector and to some Dutch legislation favouring the consumers in the process of competition among undertakings for the award of contracts.

The CFI<sup>2</sup> rejected these criticisms and confirmed the validity of the reasons argued by the Commission against the application of Article 85(3). According to the CFI, the Commission was right in denying an individual exemption on the grounds that consumers did not get any share of the benefits that the system was alleged to produce and that the agreement was not an indispensable way to achieve the alleged welfare gains. The CFI confirmed that only the microeconomic analysis of the conditions established in Article 85(3) for granting individual exemptions is relevant for that purpose.

### Example 2: Stichting Baksteen (1994)

Stichting Baksteen notified an agreement signed by 16 Dutch brick manufacturers with the purpose of re-structuring this

industrial sector. The Dutch brick industry has experienced a persistent decline in demand due not only to cyclical fluctuations but also to the progressive substitution of bricks by other more modern building materials. This evolution of the sector indicates the existence of a 'structural excess-capacity' which the members of the agreement estimated in 217 million bricks. Sixteen companies created a compensation fund that is managed by Stichting Baksteen with the purpose of compensating for the costs associated with the effective closing-down of productive capacity by members. Stichting Baksteen was also responsible for the surveillance of a social plan agreed with the trade unions.

Such as it was notified, the agreement could not benefit from an individual exemption under Article 85(3), as some of the provisions of the agreement were not considered as indispensable to achieve the elimination of excess capacity. In particular, the Commission considered that one important element of the agreement — a system establishing production quotas distributing total production among the members — was not compatible with competition law. After the removal of these elements by Stichting Baksteen, the Commission considered that the new version of the agreement met the conditions for an individual exemption under Article 85(3).

In this case, the Commission considered that after the required changes, the agreement fulfils all the criteria presented by the Commission in the XIIth Annual report on Competition (1982) for the exemption of restructuring agreements because:

- the agreement improves production conditions by eliminating economically obsolete productive capacity;
- consumers benefit from part of the gains derived from the restructuring, as there are no production quotas assigned to competitors;
- the agreement is limited to the strictly necessary measures to reduce capacity without affecting prices and is limited in time. Furthermore, the possible entry of imports from neighbouring Member States limits the competition impact of the agreement, which ensures the persistence of substantial competition in the relevant market.

## 2.2. Mergers and acquisitions

The relative importance of mergers and acquisitions in a given country gives an indication about the propensity of firms from that country to use external rather than internal sources of growth. Takeovers, mergers, acquisitions of firms and other forms of external growth can help firms to grow fast or to acquire complementary assets that they may find necessary to expand their product range or to have access to certain markets. On the other hand, this type of growth has financial repercussions on firms, particularly when the operation is

<sup>1</sup> SPO also alleged procedural problems and lack of significant impact on intra-Community trade.

<sup>2</sup> T-29-92, SPO v Commission, CFI ICH, 21 February 1995.

**Table 1****The Netherlands as a bidder: Total number of mergers and acquisitions**

	1989	1990	1991	1992	1993	1994
Netherlands	236	259	199	200	205	124
Belgium	19	15	13	23	13	8
Denmark		4	5	1	7	5
Ireland	1		1	1	2	2
France	14	15	11	8	10	10
Germany	40	48	37	16	40	27
Greece	1	1	1			
Italy	2	6	4	2	2	7
Luxembourg	1					1
Portugal					1	1
Spain	5	10	5	9	9	7
UK	14	22	14	7	10	10
EUR 12 <sup>1</sup>	97	121	91	67	94	78
Austria	1		1	1		1
Finland				1	2	
Sweden	3		6	5	2	3
EUR 15 <sup>1</sup>	101	121	98	74	98	82
USA	19	19	12	13	13	25
Japan				3	3	
Others	9	9	15	22	23	26
Total	365	408	324	312	342	257

<sup>1</sup> Excluding The Netherlands.

Source: Amdata.

financed with borrowed funds or when the firm has to raise capital in financial markets, because these operations are risky and the resulting corporation may have difficulties in coordinating the new and old activities, assets or personnel. Furthermore, studying the patterns of the concentrative activities of firms is interesting because it can help identify flows of foreign direct investment, which act as substitutes or complements to trade.

In principle, mergers and acquisitions are perfectly legitimate operations. Especially in the context of processes of market integration like the internal market programme, they can contribute significantly to modify the structure of companies so that they can achieve a more efficient scale. However, mergers and other types of concentrations can be used by firms as a means to attain or increase dominant positions in their markets. For this reason, competition authorities must keep a certain surveillance of these activities to avoid those undesirable effects of concentration activities on competition. In the Netherlands, a 'merger code' introduced in 1975 required all bids to be notified. However, the authorities had no real power to oppose a deal in practice. The purpose of the notification

requirement seemed to respond to social and general economic rather than to competition policy considerations.

In the context of mergers and acquisitions at European level, the Netherlands play a very important role. The number of mergers involving Dutch companies increased considerably towards the end of the 1980s. In terms of number of concentrative operations registered by the Amdata database<sup>1</sup> and for the 1986-94 period, the Netherlands accounted for approximately 10% of the total of transnational operations between companies of different Member States, both as buyer and target of mergers and acquisitions. This places the Netherlands as the fourth largest bidding country of the European Union and the fifth country more frequently chosen by companies from other Member States to acquire existing European firms.

<sup>1</sup> See *European Economy* No 57 for a description of this database. It must be said that Amdata does not provide a full coverage for the Netherlands before 1989.

**Table 2****The Netherlands as a target: Total number of mergers and acquisitions**

	1989	1990	1991	1992	1993	1994
Netherlands	236	259	199	200	205	124
Belgium	11	9	1	5	5	8
Denmark	7	4	7	3	1	1
Ireland	10	5	1	4	4	2
France	16	20	10	12	10	4
Germany	21	11	16	19	19	22
Greece						
Italy	2	3	1	2	2	2
Luxembourg	1	1	1	2	1	
Portugal						
Spain						
UK	87	47	20	27	19	25
EUR 12 <sup>1</sup>	155	100	57	74	61	64
Austria	1	1	1		1	
Finland	11	6	2	3	1	2
Sweden	15	12	8	7	1	2
EUR 15 <sup>1</sup>	182	119	68	84	64	68
USA	17	18	13	13	21	11
Japan	2	7	7	3	2	1
Others	19	22	14	29	24	16
Total	456	425	301	329	316	220

<sup>1</sup> Excluding The Netherlands.

Source: Amdata.

Tables 1 and 2 show the distribution of concentrative operations involving firms from the Netherlands for the period 1989-94. Dutch firms show a particularly high frequency to bid for German firms. The second preferred destination of Dutch acquisitions abroad is Belgium, closely followed by France and the United Kingdom. However, the pattern in the flows of acquisitions of Dutch firms by foreign companies is quite different. The United Kingdom is by far the first source of funds aiming at the acquisition of Dutch companies. For instance in 1989, more than 50% of all Community concentrations having a Dutch firm as target had their origin in the UK.

Concentrative operations of national dimensions in the Netherlands are relatively abundant in number, accounting for approximately twice as many operations involving firms from other Community countries and Dutch firms. However, these operations have relatively small economic importance in comparison with crossborder concentrations. Only in 1991, and to a lesser extent in 1990 and 1993, the value of national acquisitions was relatively important as compared to transnational operations. This was due to national operations

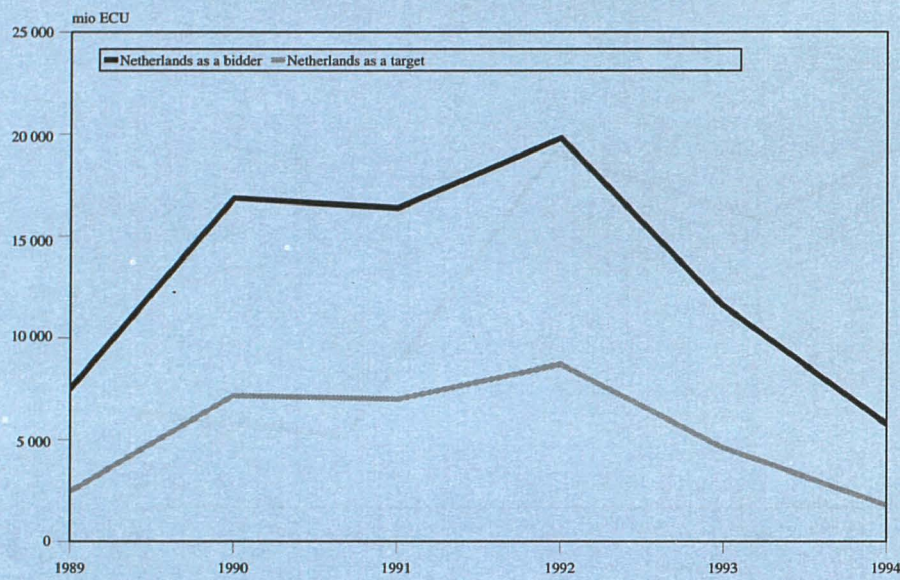
taking place in the financial sector and, particularly, to the acquisition of an insurance company by a large financial institution in 1990 with a bid value close to ECU 5 billion.

Operations involving Dutch and non-EU firms are also relatively frequent, especially when the Dutch company is the target of the operation. The USA and Sweden appear as the most frequent buyers of Dutch firms in the period under consideration.

Tables 1 and 2 show that the number of bids originating in the Netherlands is much higher than the number of concentrative operations having a Dutch firm as target. Looking at the sums of the values of bids having their origin in the Netherlands and those aiming at Dutch firms reveals a similar picture. As Graph 1 shows,<sup>1</sup> the total value of bids for foreign companies made by

<sup>1</sup> It must be said that Amdata does not give the bid value for all the registered operations. The data presented in Graph 1 correspond to those operations for which the value of the operation is known.



**GRAPH 1: Total value of concentrations having a Dutch firm as a bidder or target**

Source: Amdata.

Dutch firms in the period under consideration was always higher than the total value of acquisitions of Dutch firms by foreign companies.

The services sectors and especially the financial and wholesale distribution sectors present a higher frequency of concentrative operations than manufacturing. In manufacturing, 'paper and paper products' appears as the first sector, both in number of operations having as origin and target Dutch firms in the period 1986-94. Mechanical engineering is the second most often targeted Dutch sector, followed by food products. Dutch firms show high frequencies of bids for foreign firms in the mechanical engineering and in the electrical and electronic sectors.

This characteristic of the Netherlands as a net buyer of foreign companies is also reflected in the substantial difference in the average value of both types of acquisitions. While the purchase of foreign companies by Dutch firms had an average bid value ranging from ECU 682 million in 1992 to ECU 131 million in 1994, the average value of Dutch firms bought by foreign companies went from ECU 47 million in 1992 to ECU 189 million in 1994.

### 2.3. State aid

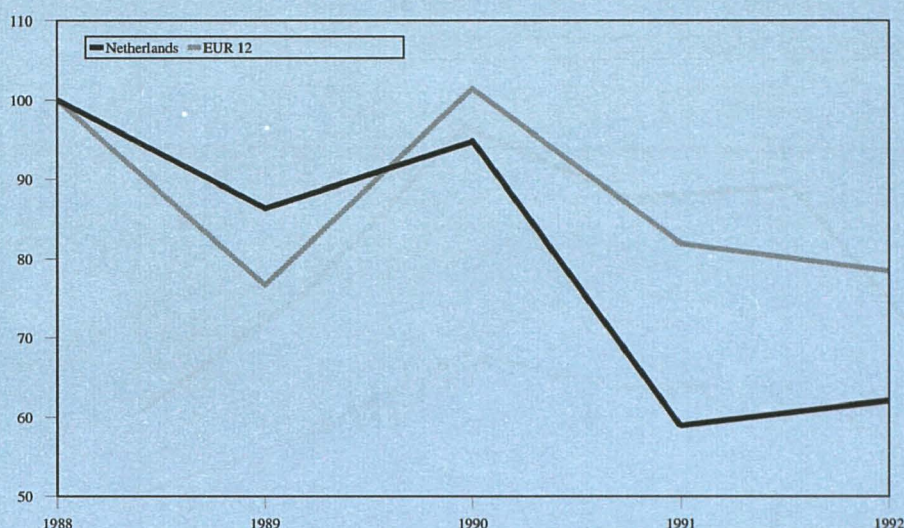
European competition policy has always emphasized the importance of controlling State aid in the Union. In the context of the existing European economic union, the control of State aid is absolutely necessary to avoid distortions of competition introduced by Member States to give a relative advantage to domestic producers over competitors from other Member States. At the macroeconomic level, State aid, as any other component of public spending, contributes to budget deficit, which confers them importance for the assessment of convergence criteria for monetary union. Thus, there are both micro- and macroeconomic arguments to pay attention to the evolution of State aid.

State aid in the Netherlands is relatively unimportant in comparison with the EU average. During the latest period for which figures are available, 1990-92,<sup>1</sup> State aid in the

<sup>1</sup> See Fourth Survey on State aids in the European Union in the manufacturing and certain other sectors, Office for Official Publications of the European Communities, 1995.



**GRAPH 2: Evolution of State aid to manufacturing in real terms for EUR 12 and the Netherlands, 1988-92 (1988 = 100)**



Source: Fourth Survey on State aids in the European Union in the manufacturing and certain other sectors.

Netherlands accounted for 0,9% of GDP while this percentage was substantially higher for the 12 countries that integrated the Union at that time (1,8%). In terms of State aid per person employed, there is also a substantial difference between ECU 338,3 per person in the Netherlands and ECU 703 in the whole of the Union. As a percentage of government expenditure, State aid in the Netherlands represented 1,7% in 1990-92, while that percentage was 3,8% for EUR 12.

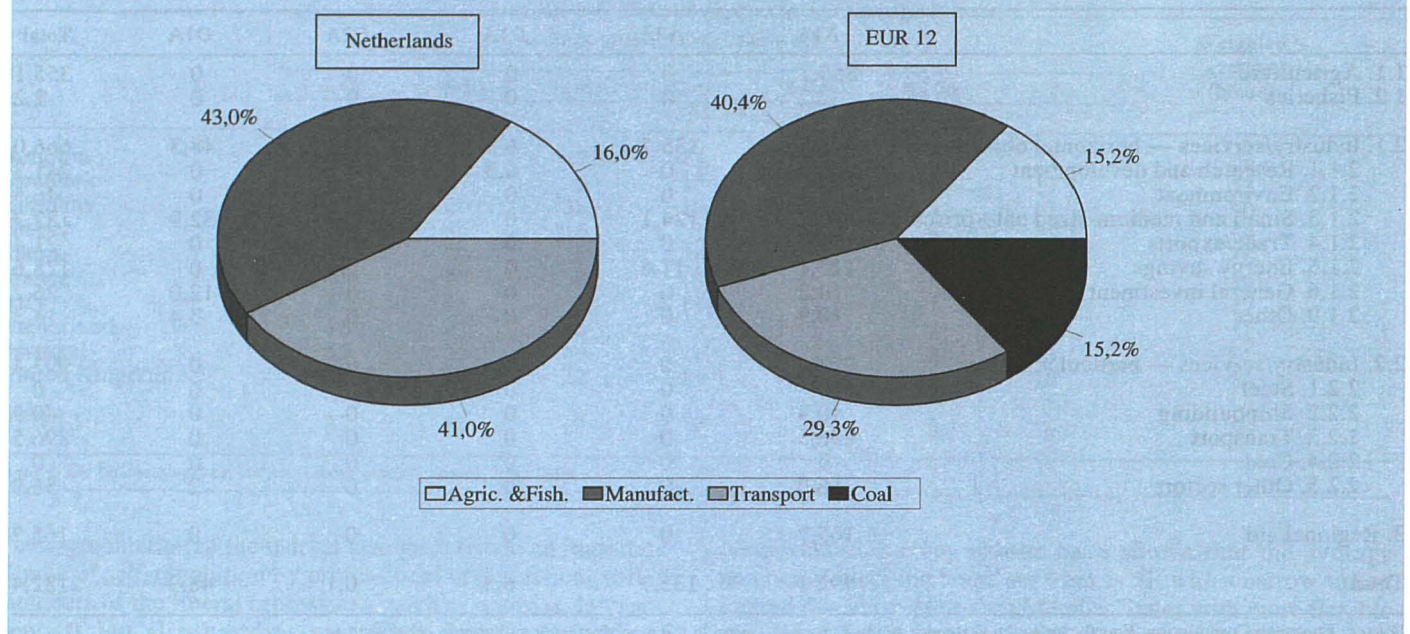
Moreover, State aid in the Netherlands shows a declining trend. As Graph 2 shows, State aid for manufacturing has decreased in the Netherlands by approximately 30% between 1988 and 1992 in real terms, while for EUR 12 it remains practically constant, with a somewhat decreasing trend. This difference in tendencies is more distinctive if we use data for 1986-88 from the Third survey on State aids.<sup>1</sup> Overall State aid in the Netherlands accounted for 1,3% of the GDP in 1986-88, and

this percentage dropped to 0,9% in 1990-92. However, for the group of 12 Member States under consideration, State aid maintained a practically constant share of GDP in the two periods under consideration (2,2% in 1986-88 and 2,3% in 1990-92).

The distribution of all State aid by sector presents some peculiarities in the Netherlands with respect to the Union's average. As Graph 3 shows, the manufacturing sector accounts for the largest share of all State aid with 43% in the Netherlands and 40% in the Union. However, the transport sector absorbs almost the same percentage in the Netherlands, with 41% while this percentage is just 29% in the Union. On the other hand, the coal sector, which does not receive State aid in the Netherlands has an important weight in the Union with 15% of all aid granted by the 12 Member States in the 1990-92 period. Furthermore, the importance of aid to the transport sector has grown over time. In the Third survey on State aids, it was reported that State aid to transport represented 32% of all aid granted in that country during the 1986-88 period. This percentage went up to 35% in 1988-90 to reach the 41% level in the last period for which we have figures. This increasing importance of aid to transport has resulted in relative reductions

<sup>1</sup> The time series for State aid for the overlapping periods of the second and fourth survey do not coincide. This is due mainly to differences in the original data supplied by Member States for those periods at different points in time.



**GRAPH 3: Breakdown by sector of overall State aid in the Netherlands and in EUR 12 (1990-92)**

in aid to agriculture and fisheries, which accounted for 23% in 1986-88 and now represents just 16% of the total.

Table 3 below gives a more detailed account of the distribution of State aid by sector and objective in the Netherlands for 1990-92. Figures in Table 3 are annual averages for the period expressed in million ECU. The columns indicate categories of aid. The codes mean the following:

- A1A grants, interest subsidies directly received by the recipient and R&D schemes
- A2A tax credits, tax allowances, reductions in social security contributions and other tax measures.
- C1A soft loans, participatory loans
- C2A tax deferrals
- D1A aid under the form of guarantees.

As the table shows, sector-specific aid to the transport sector has a paramount importance in the Netherlands. Most of the aid

is granted under Council Regulations Nos 1191/69 and 1192/69 of 26 June 1969 on actions by Member States concerning the obligations inherent in the concept of a public service in transport by rail, road, and inland waterway and on common rules for the normalization of the accounts of railway undertakings. To a large extent, these forms of aid correspond to subsidies to railway infrastructure. They account for approximately 12% of the gross value-added of the transport sector, excluding sea and air transport.

Horizontal objectives amount to 30,5% of all State aid registered in the Fourth survey. In this group, State aid to research and development activities is the most important horizontal objective followed by aid to small and medium-sized enterprises (SMEs) and energy savings. Aid to agriculture represents just 16,3% of the total registered and regional aid, with 7,6% practically non-existent.

In terms of instruments, direct grants form by far the preferred instrument for the concession of State aid in the Netherlands, with 91,3% of the total. Some instruments are predominantly used for certain purposes. For instance, direct grants are very seldom used for SMEs. To transfer public funds to these firms, tax credits, tax allowances, reductions in social security



**Table 3****Distribution by sector/objective of the annual average of State aid, 1990-92 (ECU million)**

	A1A	A2A	C1A	C2A	D1A	Total
1.1. Agriculture	355,1	0	0	0	0	355,1
1.2. Fisheries	2,2	0	0	0	0	2,2
2.1. Industry/services — horizontal objectives	475,7	135,7	6,3	0,1	48,3	666,0
2.1.1. Research and development	235,0	0	6,3	0	0	241,3
2.1.2. Environment	46,4	0	0	0,1	0	46,5
2.1.3. Small and medium-sized enterprises	30,7	124,1	0	0	32,9	187,7
2.1.4. Trade/exports	21,4	0	0	0	0	21,4
2.1.5. Energy savings	117,1	11,6	0	0	0	128,6
2.1.6. General investment	14,2	0	0	0	12,0	26,2
2.1.9. Other	10,9	0	0	0	3,4	14,3
2.2. Industry/services — particular sectors	993,4	0	0	0	0	993,4
2.2.1. Steel	0	0	0	0	0	0
2.2.2. Shipbuilding	40,9	0	0	0	0	40,9
2.2.3. Transport	896,5	0	0	0	0	896,5
2.2.4. Coal	0	0	0	0	0	0
2.2.5. Other sectors	56,0	0	0	0	0	56,0
3. Regional aid	165,7	0	0	0	0	165,7
Total	1992,1	135,7	6,3	0,1	48,3	2182,4

Source: European Commission, Fourth survey on State aids in the European Union in the manufacturing and certain other sectors.

contributions and other tax measures, as well as aid under the form of guarantees are the predominant instruments. Soft loans are also used to subsidize R&D and aid under the form of guarantees are frequently used for general investment purposes.

## 2.4. Regulation

Many barriers of entry and the lack of price competition are often the result of government regulations. Although the original aim of these regulations was, in most cases, not to restrict competition, this is very often the (undesired) result. A good example is the zoning regulation that was set up to protect existing shopping areas in city centres by restricting the creation of new large surface retail outlets outside of town. Such a policy has the justified objectives of preventing the degeneration of city centres, limiting the use of cars for shopping and carefully using the scarce open space. However, side effects are limiting the possibility to take advantage of economies of scale and restricting the entry of large foreign retailers to the Dutch market, which effectively limits the degree of competition.

Another example is the Business Establishment Act, which was originally introduced in 1954 and has recently been overhauled. To promote the quality of business conduct and to avoid the negative effects of unfair competition by unqualified firms, it forbids the establishment of a new business without a proper licence and determined minimum qualifications for the establishment of enterprises. The qualifications consisted of requirements for general business education of the management as well as requirements for professional or skill competence. The requirements, however, were based on the small-scaled and narrowly defined production organization of the 1950s. There were, for instance, separate requirements for ladies' and gentlemen's hairdressers; also, a bricklayer was not allowed to do the plastering of a building. The purchase of a new kitchen, for instance, implied strictly speaking contracting four different people to install it: one for the electrical equipment, one for the plumbing, one for the gas and one for installing the cupboards. Obviously such a fine-stitched law not only threw up enormous barriers to entry but also limited the flexibility between sectors of the economy. The Law has also promoted the development of numerous well-organized branch organizations that were responsible for training and educating the people of their respective branch.

**Table 4****Distribution of shopping hours in retail trade, 1994**

	Average opening hours per week							Weighted average (hours)
	≤ 45	46-50	51-55	56-60	61-65	66-75	≥ 76	
	(%)							
Belgium	27	15	9	14	4	19	11	56
Denmark	30	27	9	13	4	6	11	53
Germany	23	20	38	10	2	1	1	50
Greece	20	15	15	1	21	6	22	59
Spain	56	20	8	6	2	3	3	46
France	47	20	9	8	5	6	5	49
Italy	57	11	1	11	17	1	0	47
Netherlands	16	21	48	9	1	3	2	51
Portugal	55	17	4	1	2	3	18	51
United Kingdom	24	18	22	11	3	11	10	54
EUR 10	37	18	19	9	6	5	4	50

Source: EU business survey: *Ad hoc* labour market survey, June 1994.

The segmentation of the market also gave rise to an important degree of self-regulation by professional organizations (often members of the liberal professions, such as notaries, lawyers, dentists but also hairdressers). They impose all kinds of qualitative as well as quantitative admission requirements that act as barriers to entry to new members of that profession. Furthermore, they also monitor the competence and ethical behaviour of their members. Some associations also set up zoning regulations for specific shopping centres, which may include rules stipulating, for example, that the tenants of a shopping centre may include only one shoe shop or one bakery to protect the livelihood of the sole provider of shoes or bread in that complex. To limit the competition to an absolute minimum, there are sometimes rules that declare which specific products each authorized shop is permitted to sell. The organizations consider themselves beneficial to the consumer because they provide a standard of quality. However, their self-regulation often leads to collusive behaviour, market sharing and price fixing.

The Law on shopping hours, which is currently being revised, was another example of government regulation that limited the possibilities for competition. This very restrictive law stemmed from around 1930 and was based on a traditional Dutch society where the men work and the women stay at home to look after their families and do the shopping. To protect the quality of life of people working in the distribution sector, the possibilities to compete by providing a better service by extending shopping hours was banned. In general, shops were allowed to sell their goods only from 8.30 to 18.00 on weekdays and from 8.30 to 17.00 on Saturdays, with a maximum of 52 hours per week. To buy a loaf of bread on Sunday is not possible in the

Netherlands. Survey results have shown that the average number of shopping hours per week is 51, with a narrow spread around this average.<sup>1</sup> Other Member States with more flexible shopping hours have a much higher variance in shopping hours. The same survey also revealed that the main reason for retailers not to increase their opening hours in the Netherlands is the existing regulation.

Direct government regulation in the supply of goods and services is limited but the government intervenes, directly or through subsidies, in important sectors of the economy (agriculture, public utilities, constructions, public transportation, taxi services, telecommunication, insurance, health service). The housing sector is very regulated. The original aim was to provide proper housing at affordable prices. About three quarters of rented houses are owned by public housing associations or local authorities and rents are regulated for almost all rented dwellings. Since the legal rent increases used to be too low to cover for increased capital costs, an elaborate subsidy scheme to the public housing associations was set up, which has disturbed private investment in housing.

Combined, all these laws, regulations and rules generate a web of barriers to entry that might limit the flexibility and innovative capacity of the Dutch economy. Gradus (1994) ranked EU Member States (excluding Luxembourg) based on the rigidity of their regulation of product and labour markets. The Netherlands turned out to have the most restrictive regulatory framework, especially because of the various legislations of product markets that are discussed earlier.

<sup>1</sup> European Commission (1994b).

**Table 5****Ranking of countries based on rigidity of product markets regulation<sup>1</sup>**

	Law on shopping hours	Establishment law	Law on economic competition	Control of mergers	Total
Spain	1	1	1	5	1
Portugal	1	1	1	6	2
Ireland	1	1	6	3	3
Greece	1	6	6	1	4
France	1	6	1	8	5
Italy	8	6	1	4	6
Belgium	6	9	6	2	7
UK	7	1	9	9	8
Denmark	9	1	9	10	9
Germany	10	11	1	7	9
Netherlands	11	9	11	10	11

<sup>1</sup> Rankings based on the specific restriction; the numbers rise with higher rigidity.  
Source: Gradus (1994).

### 3. Economic costs of lack of competition

In theory the costs of market failure are fairly easy to assess. The static costs of monopoly consist of a distributive and an allocative effect. The distributive effect contains the transfer of wealth from the consumer to the monopolist. The allocative effect is brought about by the fact that some consumers who would buy the product at the competitive price will no longer buy it under the monopoly price (non-provision). The dynamic costs of monopoly are more complicated to rate. Profits earned through the exploitation of a monopoly position will distort dynamic incentives and investment decisions and new product development might be stifled.

Measuring the costs of market failure in the real world is much more complicated. If data on price and quantity were available for both the monopoly and the competitive outcomes of a particular industry, comparing total welfare in the two situations in order to arrive at an estimate of the static dead-weight welfare loss would be relatively straightforward. The difficulty is that only observed data are available, and that the price and quantity distortions caused by monopolization are very difficult to measure.

Moreover, it is often impossible to measure the degree of competitive behaviour. The abuse of a dominant market position might be associated with high market shares, high entry barriers, lack of price competition and any combination of high profits, poor efficiency or a low rate of technical progress, but none of these in itself necessarily indicates the existence or abuse of market power. Market failure is often

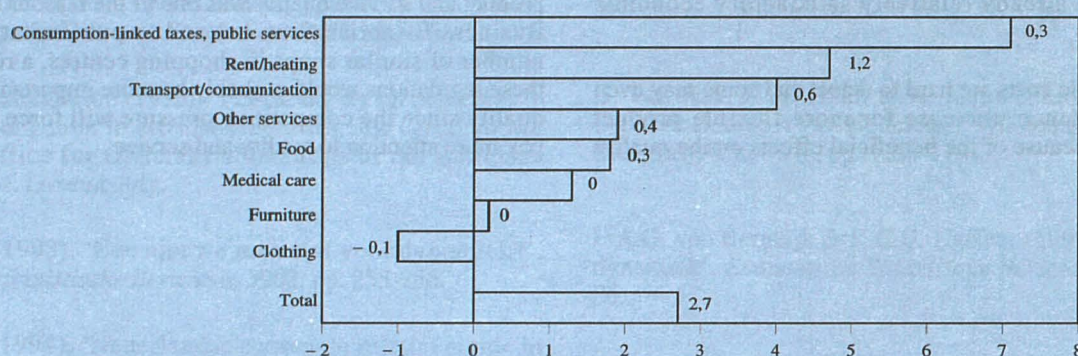
associated with high profits because of the theoretical link between monopolistic and profit-maximizing behaviour. In practice high profits are neither a necessary nor a sufficient condition for identifying dominant firm abuse. High profits may be due to good competitive performance or simply good fortune, while low profits may merely disguise excess cost levels or lack of innovative activity and hidden monopoly abuse. The best reward for holding a dominant position might be the ability to live an easy life, undertaking the minimum of research and development and allowing costs to rise. On the other hand, a monopolist might be earning normal profits and could also be technically efficient, but in the absence of any competitive pressure from other firms, there would be no incentive to supply products to the specification required by consumers. Such a firm might not realize what true consumer preferences are, and incentives to undertake research and develop new products would be weakened in the absence of competition.

On a macroeconomic level, a lack of competition in an economy might be translated into a higher price level or lower output. However, these negative effects are broadly absent in the Netherlands, in contrast to other European countries with a weak competition policy, such as Sweden, Switzerland and Denmark.<sup>1</sup> In recent decades, the general growth and inflation performance of the Netherlands has been relatively satisfactory<sup>2</sup> and does not seem to be a reason for concern on a

<sup>1</sup> OECD (1993), p. 57.

<sup>2</sup> See also Part I of this study (Recent developments and prospects).



**GRAPH 4: Composition of inflation, 1994**

Source: CBS.

lack of competition. Although the contribution to inflation by the highly regulated sectors (housing, transport and communication) was very high in recent years, this was more the result of receding State intervention (lower subsidies) than an illustration of a lack of competition. A possible explanation for the absence of visible macroeconomic effects would be that the high degree of openness to international competition could have pushed Dutch companies to a more competitive conduct, despite the numerous restrictions and possibilities for collusive behaviour. It is also possible that the negative effect of too little competitive behaviour was compensated by other positive evolutions in the Dutch economy, such as the continued wage moderation.

Since a lack of competitive behaviour is hard to detect on a macroeconomic level, a number of studies have recently been conducted to try to determine the degree of market inflexibility in various sectors. Van Bergeijk and Haffner (1993) used the 'slowness indicator', based on the degree of price adjustment to changes in the degree of capacity utilization. In a competitive market, prices should adjust rapidly to changing demand and supply conditions, which are reflected in the degree of capacity utilization. They concluded that almost all Dutch product sectors lacked flexibility. However, Gradus (1993) pointed out

that the slowness indicator is not relevant for sectors where price takership is the rule, since in this case the price evolution is independent of the degree of capacity utilization in the sector. Furthermore, there are other possible rationalizations besides a lack of competition to explain sticky prices. In another study, Thurik (1993) found no signs of inflexibility, measured by the extent companies can set prices above marginal costs (Lerner index), but this work was limited to the manufacturing sector. Studies using more indirect indicators<sup>1</sup> were more successful in finding some evidence for inflexibility, particularly in the sheltered domestic sector.

To assess the possible impact of a low degree of competition, Van Sinderen et al. (1994) constructed a general equilibrium model with variable degrees of competitive behaviour on both the product and labour market. A model version with an inflexible labour and product market proved to be the best representation of reality. By changing the parameters of the

<sup>1</sup> Van Ark et al. (1993), Thurik (1994).

competitive behaviour, it was calculated that the average yearly growth of production in the Netherlands in the period 1984-90 could have been 0,5 percentage point higher if product markets had been more flexible.<sup>1</sup> These calculations show that the economic cost of a lack of competition should be seen as a missed opportunity that could have had an additional beneficial influence on the already relatively satisfactory economic development.

Although economic costs are hard to detect and some may even doubt their existence, the case for more flexible product markets stands because of the beneficial effects on the quality

of life of the consumers. Because of the restricted shopping hours, the possibilities to go shopping during the working week are severely limited for the growing group of one-person households and households where both partners work. Therefore, their quality of life would be significantly improved if shopping hours were extended. Although the protection of product and service quality was one of the reasons to set up the Business Establishment Act and to put limitations on the number of similar shops in shopping centres, a relaxation of these regulations would probably be more important to promote quality since the competitive pressure will force the firms to pay more attention to quality and service.

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<sup>1</sup> The study also showed that employment would have grown 0,2 percentage points faster on average. According to other simulations, a more competitive labour market would not generate additional real growth, but employment would grow 0,9 percentage points faster. However, higher competition in both markets simultaneously would create a multiplier effect that could result in an average 1,1 percentage point higher growth of both production and employment, which illustrates the importance of better functioning product markets to create employment.

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# **Annex 2. Shocks to Dutch growth rate and interest rates — An empirical exploration<sup>1</sup>**

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<sup>1</sup> This Annex was prepared by J. Vilmunen of the Monetary Matters Directorate.

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## 1. Introduction

This Annex begins by describing the behaviour of the Dutch term structure of interest rates since the beginning of the 1960s, and tests to what extent movements in the term structure conform to some of the time series implications of the expectations theory of the term structure. Within this context, it concludes that for the whole sample period there is a consistent co-movement between the long- and short-term interest rates, even though both the long and short rate appear to be nonstationary variables. If interpreted strictly within the confines provided by the expectations theory, this means, roughly, that arbitrage keeps these two rates together, and that there is not much room for manipulating the slope of the term structure of the interest rate curve, i.e. the spread by policy discretion or otherwise. The volatility of the term structure of interest does not, however, seem to have been constant through time, which suggests that some caution may have to be exercised when interpreting the results. In particular, it appears that there are important subperiods when the volatility of the short-term interest rate has increased considerably, and that this factor may explain the outcome that the Dutch term structure of interest rates does not conform that well to restrictions implied by the expectations hypothesis in these subperiods. Of course, important shocks, as such, to the Dutch term structure of interest rates, underlining important changes in the financial equilibrium of the economy, cannot be ruled out. One of these 'shocks' — which has most probably come to play an important role in the Dutch economy — is the growing influence of Germany and German interest rates on the Dutch term structure of interest rates. The data show that the relationship between the Dutch and German interest rates is very tight, especially since the first half of the 1980s.

The Annex then continues to estimate the contribution of important German variables to the variability of the Dutch long-term interest rates. It uses variance decomposition methods to get an idea of the underlying shocks and their contribution to the Dutch long-term interest rates, so that a 'graphical' comparison of the relative significance of the various factors can possibly be made. It turns out that German influence comes out fairly clearly in the variance decomposition of the Dutch long-term interest rates.

Finally, the Annex looks at factors capable of contributing to the real growth of the Dutch economy. Co-integration analysis between the Dutch and German output growth and a measure of real interest rates results in an intuitively plausible long-run relationship between these variables. Variance decomposition techniques, with the three VAR variables, once again nicely complement the co-integration analysis. While real interest rates do effect Dutch real growth, the contribution from the German real growth must once again be emphasized. A closer look at the data suggests that both the nominal and real links between the Dutch and German economies are close indeed and

that the convergence has gone very far. Annex 2 ends using non-parametric techniques to measure the symmetry of the shocks to the Dutch and German real economies. The graphical presentation of the results once again emphasizes the degree of real convergence materialized thus far in the Dutch economy.

## 2. Interest rate determination

The (rational) expectations theory of the term structure of interest rates, RETS, has become the workhorse for thinking about and studying the term structure of interest rates in an economy.<sup>1</sup> So the hypothesis not only has considerable theoretical appeal, but also seems to be the organizing principle in many practical (policy) discussions focusing on interest rates. In a general sense, RETS maintains that changes in the term structure of interest rates are driven or at least dominated by expectations effects. In a more specific form, it states that, at any time point, long-term interest rates are a weighted average of expected future short-term interest rates, so that, in effect, a rational present value formula can be applied to determine the yield on any long-term debt instrument in the economy. Furthermore, even allowing for the possibility of (time-varying) risk premiums in the term structure of interest rates, sometimes argued to be too important in understanding movements in the term structure,<sup>2</sup> one may be willing to preserve the interpretation that movements in the term structure are (mainly) caused by expectations effects.

Often it is found that both the long- and short-term interest rates have long memories, meaning that the past, present and the future of these variables are highly correlated with each other. This implies that these variables are (at least, nearly) nonstationary, and changes in for instance long-term interest rates tend to have long-term effects on the level of the rate. RETS has implications for the comovement of jointly nonstationary variables, which are the result of the fact that the hypothesis can be equivalently represented as maintaining the spread, i.e. the difference between the long and short rate is a weighted average of expected changes of future short rates, which changes are stationary when the level of short rates is nonstationary. Hence, we should observe a stationary spread, although long and short rates are nonstationary.

The actual dynamics of the spread reflect the underlying dynamic adjustment of long and short rates generated by arbitrage activities in the market; in general both the long and short rates change in response to changes in arbitrage

<sup>1</sup> The literature on RETS is huge, but an excellent and accessible survey on it is Shiller (1990). Lessons from the yield curve are nicely documented, on the other hand, in Campbell (1995).

<sup>2</sup> On an approach to modelling risk (and other) premiums empirically and evaluating their significance, see for instance Engle & Ng (1991).

opportunities, so that both of these rates are, in equilibrium, endogenously determined by arbitrage. An important question is, however, whether one of the rates (e.g. short rate) is in fact exogenously determined (e.g. by policy decisions). If this is the case, then the burden of adjustment in the term structure is shifted to those rates still endogenously adjusting to arbitrage.

Hence, a set of empirical hypotheses about the Dutch term structure of interest rates will be tested using quarterly data from 1961:1-1994:4 on long- and short-term interest rates (yield on outstanding government bonds and three-month money market rate respectively).<sup>1</sup> It will be seen that the key implication, the spread being stationary, breaks down especially in the 1980s, the most plausible explanation being the growing influence of the German economy on the Dutch economy (not downplaying, of course, the effects due to the creation of the ERM in 1979, the changes in the US Central Bank's operating procedures in 1979 and increasing international mobility of capital as well improvements in the functioning of international financial markets). Estimates of the quantitative importance of the German interest rates to the corresponding Dutch rates after 1979 are thus provided.

## 2.1. Non-stationary interest rates, stationary spread and growing German influence

Table 1 presents results from unit root tests for the whole sample from 1961:1-1994:4 and for the two subsamples 1961:1-1979:3 and 1979:4-1994:4.<sup>2</sup> The table is extended to include results for the Dutch and German industrial output and inflation respectively, since these will be needed later. The hypothesis of a unit root can be rejected at conventional significance levels only in two cases (Dutch short rate and German industrial in the whole sample).

In these particular cases the results are somewhat sensitive to the lag length, and, in the case of Dutch short rates, by increasing the lag length the maintained null of a unit root cannot be rejected at conventional significance levels. Furthermore, a closer look at the residuals from these tests reveals that some of the lags beyond four (which is the maintained number of lags) are significant, and that these

further lags either reduce the autocorrelation in or the heteroscedasticity of the residuals. Hence, we tentatively do not reject the hypothesis that also the short rate has a unit root in its autoregressive polynomial in the whole sample. As regards German output, lags beyond four are clearly needed to filter out residual autocorrelation present in tests where the maintained null is that German output follows an  $AR(p)$  with  $p$  at most 4. In fact a unit root test based on eight lags seems to produce reasonable residuals. The numerical value of the ADF statistics for German output in Table 1 (-2,97) specifically refers to this case of maintained null of  $AR(p)$  with  $p = 8$ . Bearing this in mind and conditional on not rejecting the unit root in Dutch short-term interest rates the next hypothesis to be tested is that of co-integration between the Dutch long and short rate. The results are presented in Table 2.

Clearly, in the whole sample, the evidence seems to favour the hypothesis that the spread is stationary, so that relative to the time span of the whole sample changes in the slope of the Dutch term structure of interest rate curve seem to have been transitory (stationary) or, to put it in more technical terms, mean reverting. One way to interpret this evidence is to strictly adhere to the expectations theory and note that under it, debt instruments of different maturities are 'perfect' substitutes so that differences in yields are arbitrated away in the market (by,

**Table 1**

**Unit root (ADF) tests for the Dutch long and short rates as well as industrial output and inflation**

Variable	Period		
	1961:1-1994:4	1961:1-1979:3	1979:4-1994:4
NLTIR	-2,604	-1,544	-2,251
NSTIR	-3,332 *	-2,790	-2,004
NEIOT	-2,801	-2,129	-2,868
NINFL	-1,561	-1,937	-1,201
GEIOT	-2,970 *		
GINFL			-1,353
GLTIR			-2,252

Critical value,  $CV(5\%) = -2,884$   
 $CV(1\%) = -3,482$

NLTIR = Dutch long rates, NSTIR = Dutch short rates, NEIOT = Dutch industrial output, GEIOT = German industrial output, NINFL = Dutch (consumer price) inflation, GINFL = German (consumer price) inflation. The Augmented Dickey-Fuller (ADF) test is based on four lags, and the number of lags  $k$  was chosen by the rule of thumb  $k = \text{int}[4(T/100)^{1/4}]$  ( $\text{int}[\ ]$  is the integer part of the argument  $\text{int}[\ ]$ ). Except for the Dutch short rates, German industrial output in the whole sample, and, perhaps, Dutch output in the latter subsample results are fairly robust to the choice of the lag length between 4 and 6 or 7. Critical value is the asymptotic critical value of the ADF test and \* denotes significant at 5% level.

<sup>1</sup> As noted by Engsted & Tanggaard (1995), the most efficient approach to testing these implications of the RETS takes all the yields of the whole yield curve and not just two of them. Such a data set was not, however, available in the present application.

<sup>2</sup> The exact cut-off of the whole sample is, of course, somewhat arbitrary, but 1979:4 is chosen mainly for two reasons: the ERM was created in 1979 and there was a major change in the US Central Bank's operating procedures in October 1979, when it started to target monetary aggregates instead of continuing to pursue the policy of interest rate smoothing. More emphasis is put on the latter one.

**Table 2****Test for the stationarity of the Dutch spread and exogeneity of the long rate**

Period	Co-integration and exogeneity	
	Unrestricted ci-vector $\beta = (\beta_1, \beta_2)$	Stationarity of exogeneity $\chi^2(2)$
1961:1-1994:4	(1, -0,9979)**	0,0091 (0,9954)
1961:1-1979:3	(1, -1,0830)**	0,5980 (0,7416)
1979:4-1994:4	No co-integration	—

NB: Unrestricted ci-vector is the unrestricted co-integration vector estimated by the Johansen's (1991) ECM procedure. The first and second components of the vector correspond to short and long rates respectively. Stationarity and exogeneity test the joint null hypothesis of a stationary spread and exogeneity of long rates. The implied Wald statistic is distributed as  $\chi^2$  with two degrees of freedom. The numbers in parentheses in the third column are the marginal significance levels, i.e. perceived probabilities, under the null, of rejecting the correct null.

\*\* : Significant at 1% level.

typically, risk neutral investors). This implies that for instance a policy of changing the relative supplies of different debt instruments (along the term structure) cannot systematically 'twist' the term structure of interest rates.

The evidence tends to favour the stationarity of the spread also in the former subsample (1961:1-1979:3), but it should be noted that the probable loss in finite sample efficiency of the test procedure, due mainly to the heteroscedasticity of the short-term interest rate process, should be felt more strongly in this subsample than in the whole sample, since there are fewer observations in the former. Further tests of the time series properties of the spread in this subsample reveal, however, that null of a unit root is decisively rejected and that the residuals from the unit root test have a flat spectrum (no autocorrelation), but are heteroscedastic (with possibly an ARCH structure) and leptokurtic.

After 1979:3, however, the simple one-to-one relationship between the Dutch long and short rates breaks down. In this context, the evidence is decisive in the sense that cointegration of long and short rates (stationarity of the spread) does not re-emerge by changing (within reasonable limits) the lag length of the time series model (VAR) used to test it or the length of the subsample. It just seems to be the case that the Dutch term structure of interest rates has undergone, since the beginning of the 1980s, a number of shocks with the end result that it is driven by factors other than or in addition to arbitrage in domestic financial markets. To check one such possibility, we take up the (growing) influence of the German term structure on the corresponding Dutch one. But before going into the details, note further that Table 2 suggests that the Dutch long-

**Table 3****Co-integration between the Dutch interest rate and corresponding German rate and weak exogeneity of the German rate**

Interest rates	Co-integration and stationarity	
	Unrestricted ci-vector	Exogeneity of GLTIR, $\chi^2(2)$
(NLTIR, GLTIR)	(1, -1,4750)*	2,0599 (0,3570)
(NSTIR, GSTIR)	(1, -0,7074)**	3,9744 (0,1577)

LTIR and STIR refer to long and short rates respectively; N: Netherlands, G: Germany.

\* (\*\*): Significant at 5% (1%) level.

term interest rates are exogenous to the 'equilibrium' relationship between the Dutch long and short rates. This suggests two things. Firstly, long-term interest rates may have been the main source of (exogenous) shocks to and, hence, of the non-stationary behaviour of the term structure of Dutch interest rates. Secondly, adjustment to shocks to the level of interest rates seems to have taken place mainly via changes in the short-term interest rates. Hence, in a sense, (temporary) changes in the slope of the term structure of Dutch interest rates directly indicate changes in (future) short rates. Long rates change indirectly via short rates, since the latter certainly help to forecast future long rates.

Table 3 reports the results from the co-integration analysis between the Dutch and German long rates and short rates respectively.<sup>1</sup> Hence, Table 3 asks (as the null) whether the Dutch and German long rates (short rates) are co-integrated. It gives, first of all, the unrestricted estimate of the co-integration vector (first column) and, in the second column, results on the exogeneity of the corresponding German rate to this co-integration or long-run 'equilibrium' relationship between the Dutch and corresponding German rate. In this latter test, a sequence of restrictions on the co-integration vector was imposed, in addition to the exogeneity of the German rate, mainly to see whether the joint hypothesis of a stationary interest rate differential and exogeneity of the corresponding German rate is rejected.

In the case of short-term interest rates, the Wald test for exogeneity of the GSTIR is the joint hypothesis; the co-integration vector is (1, -0,80) and GSTIR is weakly exogenous. The reason for this highly specific (and, admittedly, arbitrary) joint null is that the starting point was that the short

<sup>1</sup> Unit root tests for the German long and short rates are not reported, but, for the subsample 1979:3-1994:4, the null of a unit root could not be rejected in either of the cases.



differential is stationary and the German short rate exogenous. This was rejected at conventional significant levels. The restricted co-integration vector (1, -0.80) roughly represents that vector where the component corresponding to the German short rate (0.80) is as large as can be maintained under a non-rejected joint null.<sup>1</sup>

As they stand the results are fairly encouraging and as one would have expected. The Dutch long rates are co-integrated with the corresponding German ones and, further more, the latter are weakly exogenous to the long-run 'equilibrium' relationship between the two rates. Moreover, according to the third column of Table 3, the restrictions on the co-integration vector implies that the long differential between the Netherlands and Germany is stationary,<sup>2</sup> and that shocks to the level of German long-term interest rates are an important source of shocks to the level of Dutch long rates. As for the Dutch and German short-term interest rates, similar reasoning applies, but with the qualification that the short differential itself does not seem to be stationary. Formal unit root tests on the short differential also support this conclusion as does plain graphical analysis; the highly autocorrelated Dutch-German short-term interest rate differential reflects the fact that from 1985 the Dutch short-term interest rates were persistently higher than the German ones up to the end of 1991; between 1992:1 and 1993:4, after German unification, the German short rate was persistently higher than the Dutch one; finally, since the beginning of 1994 the short rates have been roughly equal.<sup>3,4</sup>

Finally, the error-correction models implied by the (fourth-order) VAR used in testing for co-integration between the

interest rates above in Table 3 most interestingly suggest that the adjustment of the Dutch short rates to shocks to the level of the German (and, hence, Dutch) short rates is relatively fast; 60% of the adjustment takes place within one quarter. So the rate of convergence of the Dutch short rates towards the equilibrium relationship (as represented by the estimated co-integration vector) is fairly high. Furthermore, the error-correction model is capable of explaining on average 70% of the observed change in the Dutch short-term interest rates. The error-correction model for the Dutch long rates suggest, on the other hand, that about 15% of the adjustment in the long rates towards the equilibrium takes place within one quarter, and that the model is capable of explaining on average 80% of the observed change in the Dutch long rates. Hence, the rate of convergence of the Dutch long rates is considerably lower than of the Dutch short rates.

In summary then, one particularly interesting interpretation of the expression Dutch term structure of interest rate over the period from 1961 to the present is that arbitrage by forward-looking investors in the Dutch financial markets has kept the interest rates from not deviating too much from each other. The non-explosive behaviour of the Dutch spread can be interpreted as the result of this arbitrage behaviour. Furthermore, long rates seem to have the main driving force of the Dutch term structure, so that there seems to be non-trivial feedback from the dynamics of deviations from the term structure equilibrium, i.e. from the dynamics of the spread, to changes in the short-term interest rates. Long rates respond more indirectly, to lagged changes in short rates and long rates themselves. The 1980s seem to have witnessed a major change in the determinants of the Dutch term structure of interest rates; one possible source of growing influence is the German term structure.<sup>5</sup> The evidence presented in this section indicates that the Dutch long and short rates and the corresponding German ones are closely related both in levels and changes. To further examine the effects of various factors to the variability of the Dutch long-term interest rates, the next section extends the previous analysis based on VARs and presents, in graphical form, estimates of the decomposition of the forecast error variance of the Dutch long-term interest rates into the variance components associated with shocks to the underlying factors.

<sup>1</sup> It should be noted that there need not exist any widely accepted formal theory of statistical inference sustaining such a sequential testing procedure. Nevertheless, the results are given in Table 3.

<sup>2</sup> If (uncovered) interest parity sufficiently accurately represents the open economy financial equilibrium in the Netherlands, then the results in Table 3 are consistent with stationary (zero-mean) expectations of the long-run rate of depreciation of the Dutch guilder. Note that this not only seems to suggest that the target-zone for the Dutch guilder is long-run credible, but also that (albeit small) persistent rates of changes of the guilder within the (narrow) band are excluded (on the decomposition of the expected rate of depreciation of a currency into expected rate of realignment and expected rate of depreciation within the band and suggestions for measuring the two components — see Bertola & Svensson (1990) and Lindberg et al. (1991)).

<sup>3</sup> The period 1979:4-1984:4 is characterized by the high overall level and volatility of short-term interest rates, which necessarily qualifies any conclusion about the relative magnitudes of the two interest rates in this period.

<sup>4</sup> The exact nature of the joint hypothesis of restrictions on the co-integration vector and weak exogeneity of the German short rate varies somewhat according to the maintained lag length of the VAR. Most notably the 'non-rejected' component of the co-integration vector associated with the German rate increases for shorter lag length, but remains 'significantly' below unity. This only strengthens the view that there have been quantitatively (perhaps also substantially) important deviations between the short rates.

<sup>5</sup> Another, possibly highly relevant and certainly very interesting, interpretation of the idea of the Dutch term structure being driven by the German term structure is related to literature on perceived policy regimes and expected or perceived changes thereof (see especially Balduzzi et al. (1993) and McCallum (1994)); in the 1980s the Dutch authorities more consciously pursued a policy of pegging the guilder to the Deutschmark. As the very notion of expectations theory of the term structure suggests, such a policy rule should be an integral part of the modelling or an important determinant of the Dutch term structure (since the current term structure is conditional on future short rates, and hence on future monetary policy). Without explicitly incorporating such a rule into the model of the Dutch term structure, we take a short cut; we simply let the Dutch rates be determined by the corresponding German rates.

## 2.2. Variance decomposition of the Dutch long- and short-term interest rates

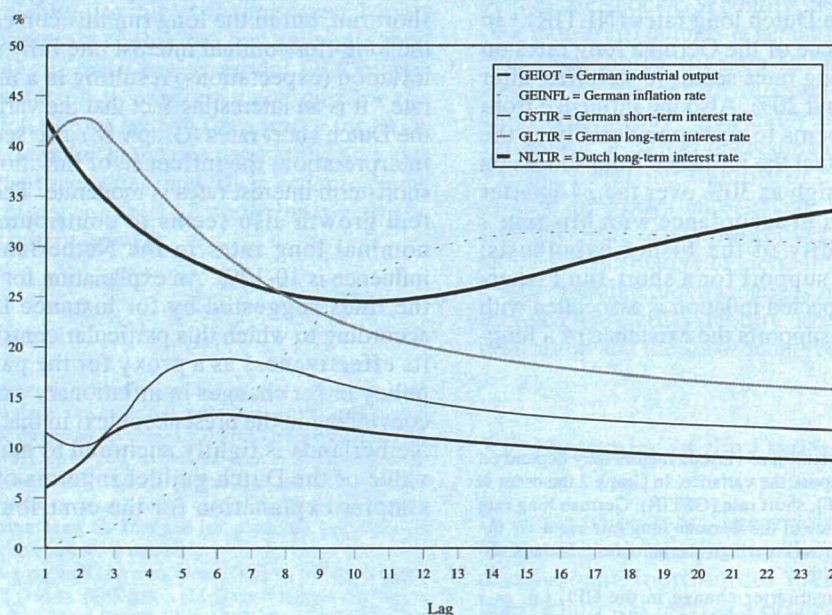
This section uses a VAR framework to determine a set of possible factors that could affect the variation in Dutch long- and short-term interest rates.<sup>1</sup> In the previous section, we concluded that, since the beginning of the 1980s, the Dutch long rate has been relatively well explained by the corresponding German rates. A similar conclusion holds for the Dutch short-term interest rate; the major factor driving it is the German short rate. This section extends the previous one in that 'the German influence' is expanded to include, in addition to German long rates, German short rates (3M), growth of industrial output (proxy for growth potential of the Dutch economy) and inflation rate, in the case of Dutch long rates, and German long and short rates, inflation and growth of industrial output in the case of Dutch short rates. An estimate of the effects these factors have on the variation of the Dutch long and short rates is presented in graphical form in Graphs 1a and 1b.

Indeed, variance decompositions based on a five-dimensional (and fourth-order) VAR estimated from 1979:4 to 1994:4 were used to further evaluate the degree of forecastability of the Dutch long-term interest rates. The VAR model makes it possible to decompose the forecast error over an arbitrary forecast horizon and to apportion the variance in the errors at any point among a set of explanatory factors. The  $k$  period-ahead forecast error, i.e. the difference between the actual long-term interest rate and VAR forecast as of  $k$  periods earlier, is attributable to unanticipated disturbances over the last  $k$  periods in all of the variables included in the VAR. Such a variance decomposition is useful in assessing the relative contribution of each factor, at a given forecast horizon, for explaining the forecast error in long-term interest rates. Consequently, the VAR framework can be used to determine a set of variables with the greatest potential for improving the forecasting properties of models of long-term interest rates.<sup>2</sup>

<sup>2</sup> The use of the VAR model in the present context raises an interesting question related to non-stationarities on co-integration; the variables in the VAR seem to be non-stationary and, according to the result presented in the previous section, co-integration relationships may exist among the variables in the VAR. In such a case the use of the unrestricted VAR as the forecasting model may imply efficiency losses, since the information in the restrictions implied by co-integration are not used in the unrestricted VAR forecasts (see for instance Engle & Yoo (1991)). On an analysis of a related problem within an explicitly common trends framework (co-integrated system), see Blix (1995), and also Warne (1993).

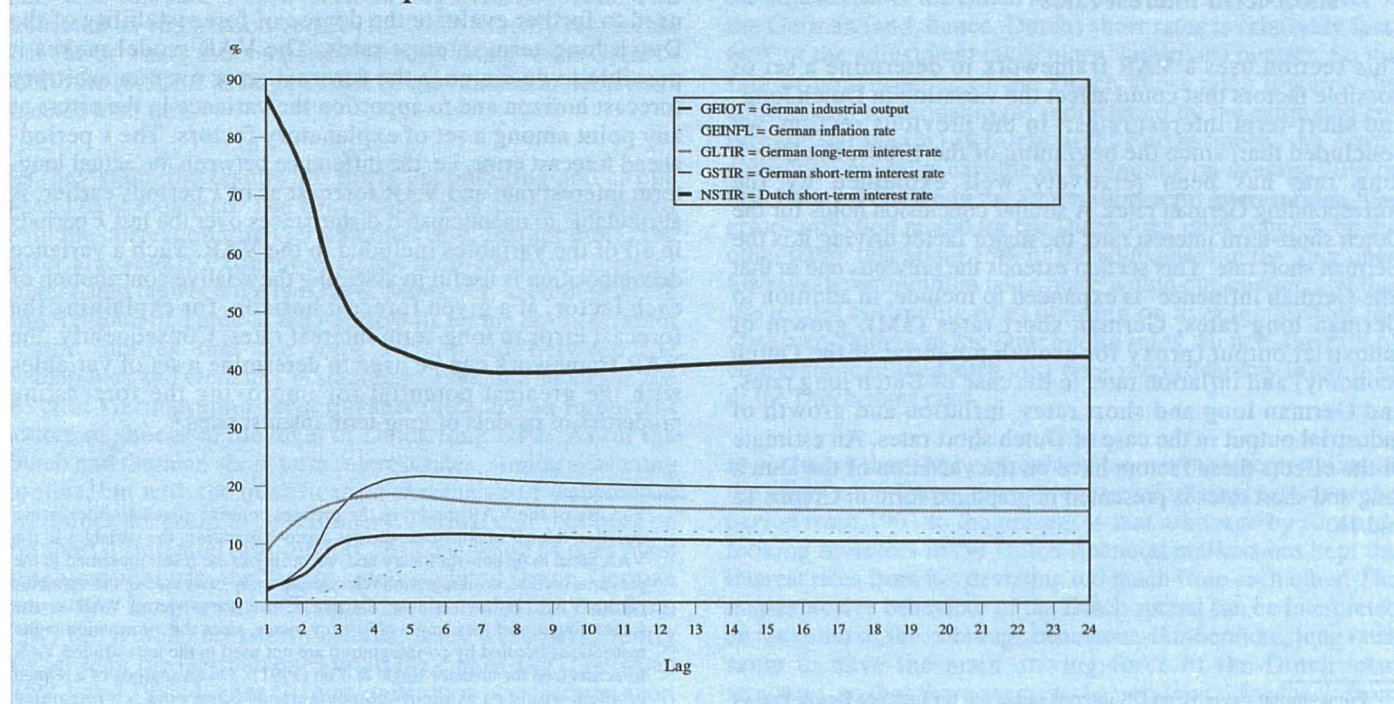
<sup>1</sup> For a similar exercise on US interest rates, see for instance Lee & Prasad (1994).

GRAPH 1a: Variance decomposition of the Dutch long-term interest rate





GRAPH 1b: Variance decomposition of the Dutch short-term interest rate



Graph 1 seems to suggest that the influence of German long rates (GLTIR) on the variability of Dutch long rates is large; in fact (at least until the eighth quarter) their contribution may even be larger than that of the Dutch long rates (NLTIR).<sup>1</sup> In quantitative terms, the influence of the German long rates on the variability of the Dutch long rates seems to stabilize, after 24 quarters (six years) at around 20%. Also the influence from German inflation<sup>2</sup> (GINF) seems to rise considerably as the forecast horizon increases. In fact the influence from shocks on inflation seems to rise to as high as 30% over the 24-quarter forecast horizon. This is well in accordance with Mishkin's (1992) analysis of the validity of the Fisher hypothesis; empirical evidence finds no support for a short-run Fisher-effect in which a change in expected inflation is associated with a change in interest rates, but supports the existence of a long-

run Fisher-effect in which inflation and interest rates have a common stochastic trend when they exhibit trends. Hence, real interest rates tend to correlate strongly with inflation over the short run, but in the long run this correlation vanishes so that the long-run nominal interest rate fully reflects the underlying inflation (expectations) resulting in a more stable real interest rate.<sup>3</sup> It is an interesting fact that the variance decomposition of the Dutch short rates (Graph 1b) also seems to support such an interpretation; the influence of inflation on the variability of short-term interest rates is moderate. Though to a lesser extent, real growth also seems to contribute to the variability of nominal long rates in the Netherlands; at maximum, the influence is 10-12%. An explanation for this contribution along the lines suggested by for instance Lee & Prasad (p. 16), according to which this particular contribution may arise from its effectiveness as a proxy for the path of future monetary policy or for changes in inflationary expectations, is not fully convincing in the present context in that monetary policy in the Netherlands is tightly anchored to maintaining the external value of the Dutch guilder in terms of the Deutschmark. A simpler explanation for the contribution from the growth

<sup>1</sup> It should be noted that the contribution of various factors may depend on the order which is used to decompose the variance. In Graph 2 the order is output (GEIOT), inflation (GINF), short rate (GSTIR), German long rate and Dutch long rate. The influence of the German long rate *vis-à-vis* the Dutch long rate is fairly robust across orderings; the influence of others *vis-à-vis* these long rates is more sensitive.

<sup>2</sup> Inflation is measured as a four-quarter change in the CPI, i.e. as a percentage change in the quarterly CPI from the corresponding quarter in the previous year. A qualitatively similar conclusion holds, if the Dutch inflation rate is used instead of the German one.

<sup>3</sup> Abstracting, of course, from other possibly important sources of risks like default risks and nontrivial liquidity risks.



variable argues that it is a proxy for 'the' real return in the economy.<sup>1</sup> On the other hand, the influence of real growth to the variability of short rates is relatively small; in fact most of the variability of the Dutch short-term interest rates is accounted for by the Dutch short-term interest rate itself, although the influence from the German short rate may amount to as high as 23%. Further, given the shape of the curve describing the contribution of the German short rate relative to the Dutch rate, one may perhaps conclude that this is mainly a reflection of the close link between monetary policies in Germany and the Netherlands (with Germany being the 'leader').

### 3. Real shocks and real convergence

Whereas the previous section analyses the determination of the term structure of interest rates in the Netherlands and, ultimately, the extent to which the term structure can be said to be determined by the German term structure, this section discusses the question of real convergence of the Dutch economy. Specifically we shall focus on two sets of questions; first of all, we shall construct nonparametric measures to evaluate the degree of symmetry of shocks to the Dutch and German output (and employment). Symmetry, or actually asymmetry, of these shocks is an extremely critical element when it comes to judging the need for exchange rate flexibility as an instrument for shock absorption under short-run nominal price stickiness. In fact, one of the basic propositions of the literature on optimal currency areas is that under short-run nominal wage stickiness, adjustment to asymmetric real demand shocks between regions takes place via employment variations unless sufficiently flexible exchange rates provide the needed buffer to counter these shocks.<sup>2</sup> Secondly, we shall construct a small dynamic time series model (VAR) and present its long-run solution to explicitly account for the determinant of the Dutch output growth (or a proxy for it). A variance decomposition, similar to the one used in the previous section, complements the time series analysis in order to check for other possible factors capable of contributing to the variability of the Dutch output growth.

#### 3.1. Symmetry of shocks

A simple non-parametric measure of the symmetry of shocks to the Dutch and German real economies builds on the variability of the difference and sum of those Dutch and German variables thought to represent the real economies. Graphs 2 and 3 present two such variability measures, 16-quarter moving standard deviations, based on two sets of real variables; Dutch and German industrial output (Graph 2) and employment (Graph 3). The reasoning behind these measures is the following; consider two random variables,  $X$  and  $Y$ , say, and denote their variances by  $\sigma^2 X$  and  $\sigma^2 Y$  respectively, the covariance between them by  $\sigma^2 X, Y$  and, finally, the variance of their sum and difference by  $\sigma^2 X+Y$  and  $\sigma^2 X-Y$  respectively. It is then well known that  $\sigma^2 X+Y = \sigma^2 X + \sigma^2 Y + 2\sigma^2 X, Y$  and  $\sigma^2 X-Y = \sigma^2 X + \sigma^2 Y - 2\sigma^2 X, Y$ , from which it follows that the variance of the sum is larger (smaller) than the variance of the difference if the random variables are positively (negatively) correlated, i.e. if  $\sigma^2 X, Y > 0$  ( $< 0$ ). By their very nature, symmetric underlying shocks or factors driving both  $X$  and  $Y$  generate positive correlation between the two, whereas asymmetric shocks generate negative correlation between  $X$  and  $Y$ .

Two things are immediately clear from the graphs; first, the volatilities are not time-invariant suggesting that the relative importance of symmetric shocks to the Dutch and German economies has varied during the course of the last 30 years. This does not go against the original reasoning, since, in general, observed shocks are combinations of symmetric and asymmetric shocks and the question at this general level boils down to the relative magnitude, in any given time span, of the symmetric shocks. Secondly, the variability of the sum of the (log industrial) outputs is generally higher than their difference. The same holds for (log industrial) employment. Hence, symmetric shocks to the Dutch and German output and employment have generally been the dominant source of variability. A further interesting observation from Graphs 2 and 3 is the surprising stability of the (log of the) relative output level in the Netherlands, except, perhaps, immediately after the first oil-price crisis. Moreover, the variability of the Dutch employment relative to Germany halved in the first half of the 1980s from the previous levels in the 1960s and 1970s and has retained its relative stability, except for shocks due to German unification and the subsequent recession in the world economy.

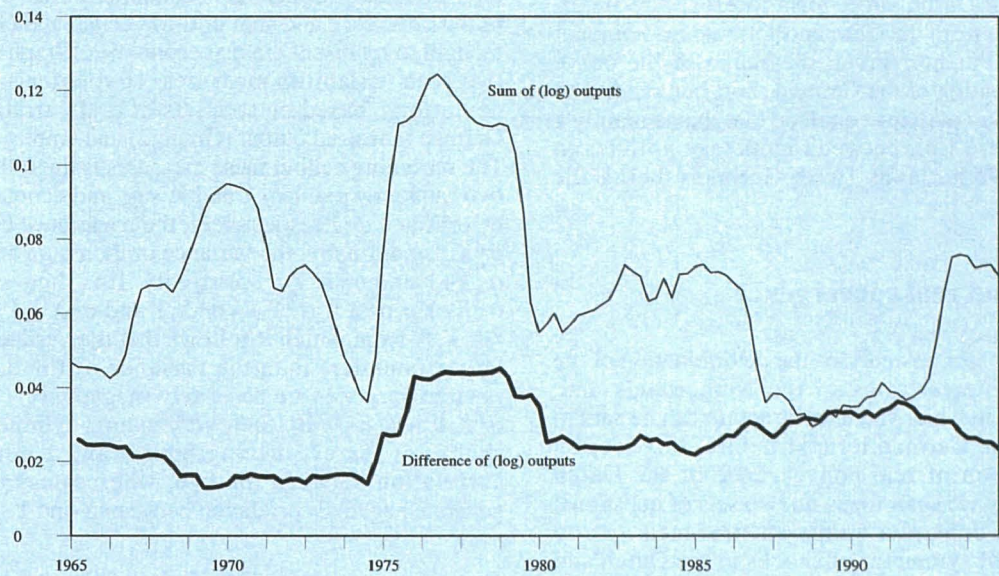
#### 3.2. Dynamics of the Dutch real growth

In order to be more specific about the importance of the German real growth to the Dutch economy, a three-dimensional, fourth-order VAR (with the possibility of co-integration) was used as a parametric workhorse to quantify the correlations of interest. The variables in the three-dimensional VAR were: growth of the Dutch (and German (industrial)

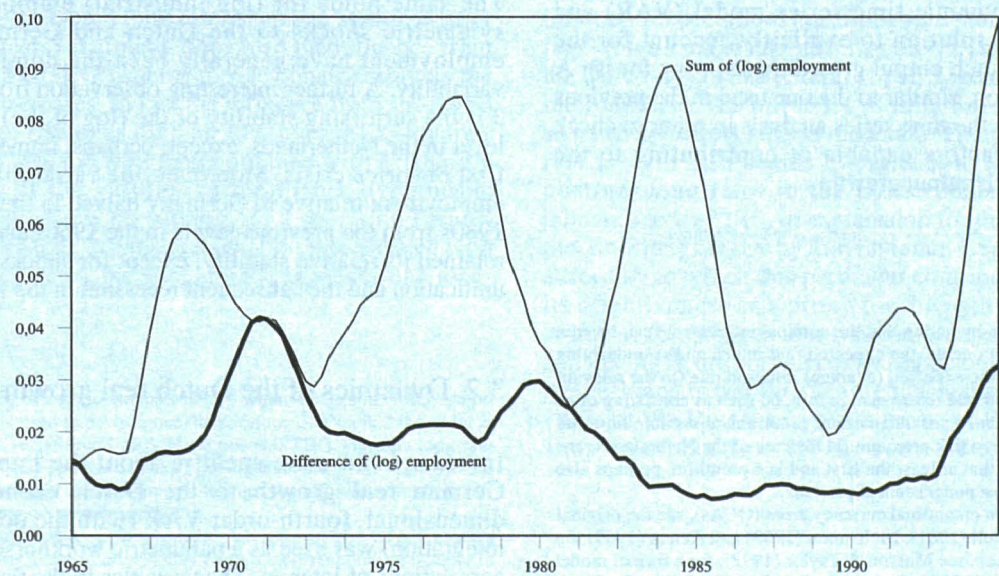
<sup>1</sup> This is most easily seen by noting that the nominal interest rate can be seen as the sum of two components, the expected real return on the underlying instrument (bond) and the expected (average) inflation rate (to the relevant maturity). The expected real return can, in turn, be seen as consisting of an expected safe real return, a possible default premium, a possible liquidity premium, and an inflation risk premium. In the case of the Netherlands, one can quite safely argue that at least the first and last premium, perhaps also the second one, is almost nonexistent at present.

<sup>2</sup> From the huge literature on optimal currency areas (OCAs), see the original contributions by Mundell (1961), McKinnon (1963) and Kenen (1969); on the more recent literature, see Masson & Taylor (1992); for a formal model on OCAs, see Bayoumi (1994); for a critical analysis on OCAs, Bofinger (1994).

GRAPH 2: Symmetry of shocks; variability of the difference and sum of outputs



GRAPH 3: Symmetry of shocks; variability of the difference and sum of employment





**Table 4****Co-integration analysis between growth of Dutch and German output and real interest rate, 1961:1-1994:4**

Null hypothesis, $r$	Test type		
	Trace test	URE ci-vector	Restricted and exogeneity $\chi^2(4)$
0 versus 1	73,70**	(1, -0,8383, 0,4700)	2,823 (0,5479)
1 versus 2	33,89**	(0,1251, 1, 0,4886)	
2 versus 3	2,795		

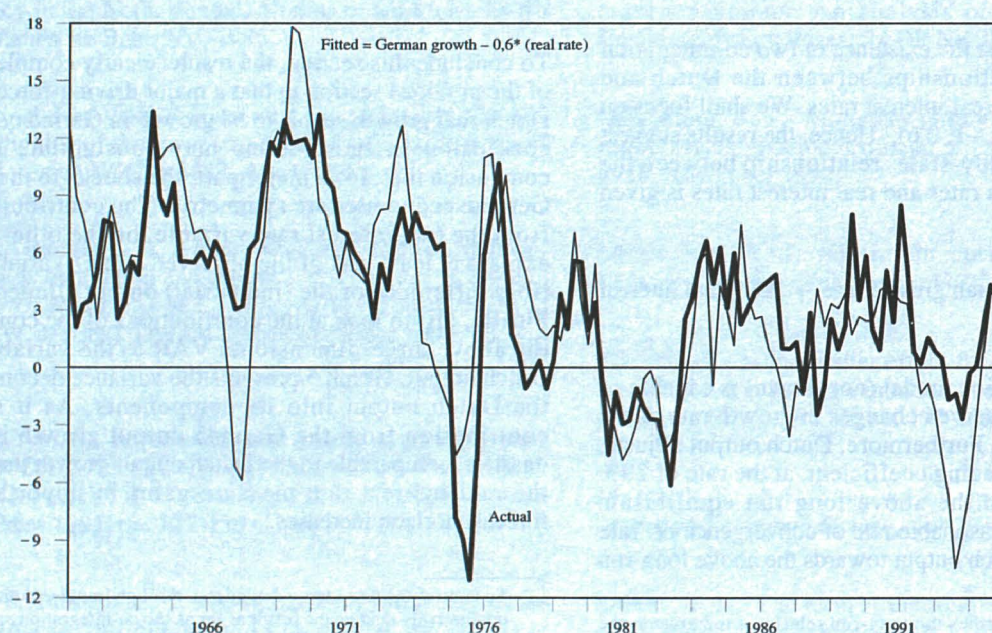
Hypothesis,  $r$  signifies a null of  $r$  co-integration vectors against the alternative of  $r + 1$ ,  $r = 0, 1, 2$ .

\*\* : Significant at 1% level. URE: Unrestricted co-integration vector, while the last column tests four restrictions imposed on the system; the composite null is that the co-integration space is spanned by the set of vectors  $\{(1, -1, 0, 6), (0, 1, 0, 4)\}$  and that the space of factor loadings is spanned by the set of vectors  $\{(1, 0, 1), (0, 8, 0, 7, 0, 4)\}$ , i.e. German output is not error-correcting with respect to the first co-integration vector.

output as well as a measure of real interest rate. Since there seems to be no single, acceptable measure of the real interest rate, a couple of alternatives, ranging from a measure of long real rates to short ones, were 'tested'. It turned out that the short-term nominal money market interest rates adjusted for inflation performed better than the other ones maintained, so this was the measure chosen. After not rejecting the null of unit

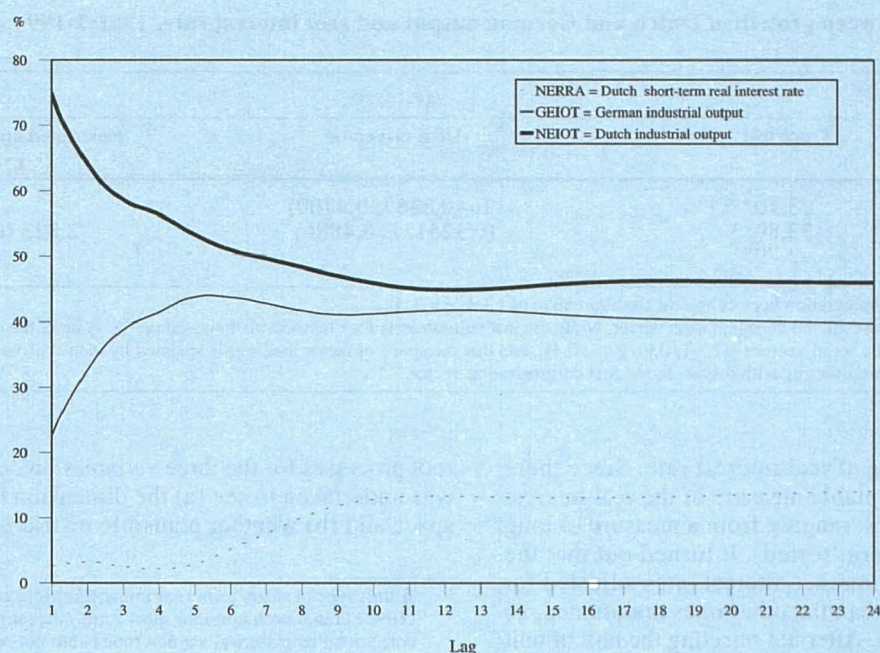
root processes for the three variables,<sup>1</sup> a co-integration analysis was undertaken to see (a) the dimension of the co-integration space and (b) whether plausible restrictions, albeit *ad hoc* in

<sup>1</sup> A unit root in short-term real interest rates is consistent with Mishkin's (1992) in that both nominal short-term interest rates and inflation rate (of corresponding maturity) are unit rooters but not co-integrated.

**GRAPH 4: Growth of the Dutch industrial output 1961:1-94:4; actual and fitted**



GRAPH 5: Variance decomposition of the Dutch industrial output



the present context, where no theoretical construct is presented to support them, of the co-integration space (and factor loadings), are supported by the data. The results are presented in Table 4.

The results strongly suggest the existence of two co-integration vectors or long-run relationships between the Dutch and German growth rates and real interest rates. We shall focus on the first of these, i.e. on  $(1, -1, 0,6)$ .<sup>1</sup> Hence, the results suggest that the long-run or 'steady-state' relationship between the Dutch and German growth rates and real interest rates is given by

$$\text{Dutch growth rate} - \text{German growth rate} + 0,6[\text{real interest rate}] = 0.$$

The implied error-correction model (not shown) is capable of explaining 50% of the observed changes in growth rate of the Dutch (industrial) output. Furthermore, Dutch output adjusts, according to the factor loading coefficient, at the rate of 20% per quarter to shocks to the above long-run equilibrium relationship, i.e. a fairly reasonable rate of convergence or 'rate of error-correction' of Dutch output towards the above long-run

relationship. Graph 4 gives an idea of the goodness-of-fit of the model; except for the end of 1960s, mid-1970s and beginning of 1990s (German unification shock), the fit of the model is perhaps surprisingly good.<sup>2</sup>

To conclude this section, the results clearly complement those of the previous section in that a major driving-force behind the Dutch real growth seems to be growth in Germany. To put the conclusion in these terms may substantiate the earlier conclusion that, for a major part, the shocks to the Dutch and German economies are symmetric. The contribution coming from the real interest rate variable, on the other hand, may explain at least part of the observed (time-)variability of the (log) difference of the (industrial) output alluded to earlier. Finally, just to look at the contributions of the components of the above three-dimensional VAR to the variability of the Dutch output, Graph 5 presents the variance decomposition of the Dutch output into its components. As it stands, the contribution from the German output growth is, after six quarters, comparable to the Dutch output growth itself, whereas the real interest rate measure gains in importance as the forecast horizon increases.

<sup>1</sup> The other one, which describes the long-run relationship between the German output and real interest rates, does not perform as well as the first one, though the relationship itself clearly is significant.

<sup>2</sup> To control for these large deviations, through impulse dummies, does not qualitatively change the result as far as the co-integration space and factor loadings are concerned. It mainly affects the German equation in the three-dimensional VAR.

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## Annex 3. Reform of the securities markets<sup>1</sup>

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<sup>1</sup> This Annex was prepared by P. Grasmann of the Financial Instruments and Capital Movements Directorate.

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## 1. Introduction

The Dutch financial system, as compared with other continental countries, has for quite some time considerably built on issuing of shares as a means of providing company financing and share trading as fee business for the financial institutions involved. Furthermore the financing needs of the government provided the basis for an active bond market. Trading in Dutch securities has been traditionally concentrated on the floor of the Amsterdam Stock Exchange, one of the oldest exchanges in the world.

During the past 10 years the role of Amsterdam as a trading place in Dutch securities was increasingly challenged, in particular by competition from London trading facilities.

The reasons for these challenges consist of a mix of general features facing a relatively small country in an international financial environment of increased capital movement and competition on the one hand, and some factors specific to Dutch financial markets which translated into stronger competition from abroad than other comparable markets faced. Furthermore, with a relatively well-developed securities and derivatives trading culture, the Netherlands might be closer to certain saturation levels of activity in these segments.

After several years of deliberalization the Amsterdam Stock Exchange reacted to this challenge by profoundly overhauling its trading system, in order to provide trading facilities designed particularly for large institutional traders and clients. These measures could not alleviate the mentioned structural disadvantages as such, but rather tried to establish trading facilities which would retain Amsterdam's competitiveness despite the fierce competition.

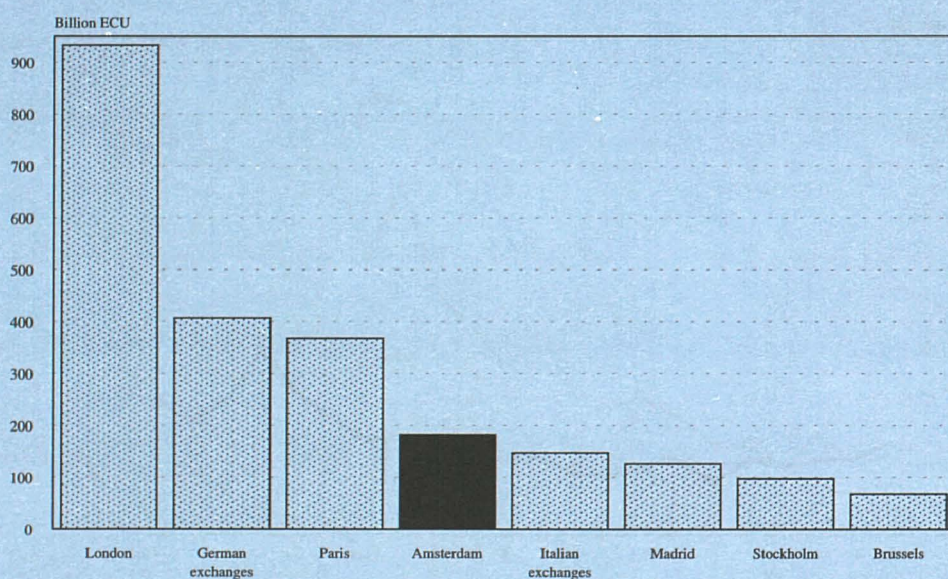
The degree of success of these measures, to be evaluated over the coming years, will also give a more general indication of the likely structure of securities-trading in the European Union in the longer run, when financial integration and cross-border financing will further increase and reduce the remaining barriers between the EU Member States' financial markets.

## 2. Market size

### Medium-sized exchange...

The Amsterdam Stock Exchange (ASE), the only Dutch exchange, is medium-sized by international standards: it is, in

**GRAPH 1: EU stock exchanges: Market capitalization, end 1994**



Source: Federation of European Stock Exchanges.



terms of market capitalization or trading volume, far behind the three big European (London, Paris, Frankfurt) or other, overseas exchanges in North America and East Asia.

In particular, relative to its domestic economy, Amsterdam is one of the leading 'second-tier' markets, in Europe along with Zurich and Milan (see Graph 1). Stock market capitalization shows Amsterdam as the fourth exchange in Europe.

### ... with relatively low turnover

However, trading activity on the Amsterdam Exchange, as compared to other exchanges in Europe, is smaller, not only smaller than on the three big markets but also smaller than in Italy or Spain.

This demonstrates that market liquidity, measured by turnover per market capitalization, is much thinner in Amsterdam than on most other larger European exchanges.

### Bond trading growing faster

The exchange trades a vast range of domestic and foreign securities. At the end of June 1994, 252 domestic and 215

foreign companies had a share listing on the ASE. However, in particular during the past five years, bond trading was the solid basis of the ASE and accounted for around 70% of total turnover (see Graph 2).

Domestic institutional and UK investors are particularly important in this segment; domestic retail investors amounted in 1993 to just 6% of total turnover.

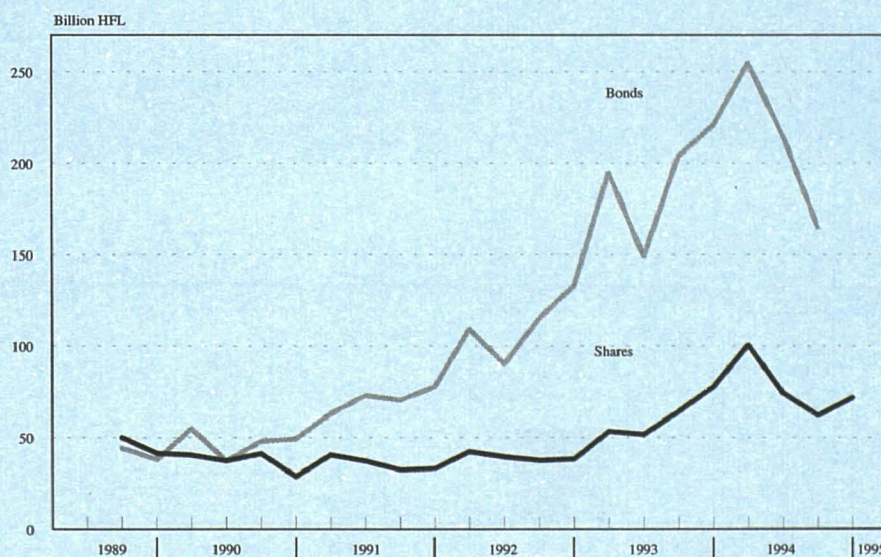
### Securities trading important business for larger banks

Securities underwriting and trading plays a relatively large role for the domestic banks. Total non-interest income of Dutch banks amounted to 0,91% of the average balance sheet size in 1993.<sup>1</sup> This compares to just 0,67% for German or 0,65% for Belgian banks.

It was in particular the few large commercial banks (ABN AMRO, Rabo, Int. Ned. Bank) (see Table 1) that played an important role.

<sup>1</sup> OECD — bank profitability, financial statements of banks. This figures comprises all fee income, of which securities business-related income plays a dominant role.

**GRAPH 2: Amsterdam Stock Exchange: Turnover**



Source: De Nederlandsche Bank, ASE.

**Table 1**

**Banks' net non-interest income (1993) (percentage of total balance sheet)**

Netherlands	0,91
Belgium	0,65
Germany	0,67
Luxembourg	0,50

Source: OECD.

### 3. Structure of securities traded

Trading concentrated on a small range of securities...

The Dutch securities markets are, as compared with other international markets, very highly concentrated on all levels: on the issuer side, the investor side and the trader side. This high

concentration is due to certain structural features of Dutch financial markets and adds to their efficiency. However, this high concentration makes Amsterdam much more vulnerable to serious competition from larger markets abroad.

... with heavy emphasis on a few blue chips ...

The Dutch stock exchange is, compared with other international exchanges of similar size, very heavily concentrated on a few international stocks. The three largest shares, Royal Dutch Shell, Unilever and Internationale Nederlanden Group (ING), account for around 50% of total stock market capitalization on the ASE, and for about 27% of the trading volume.

The 10 largest companies make up nearly 80% of total market capitalization of Dutch shares (see Table 2).

... and government bonds

The bond segment is completely dominated by trading in Dutch government bonds, accounting for 93% of total bond turnover and 70% for total securities turnover in 1993. Mostly traded

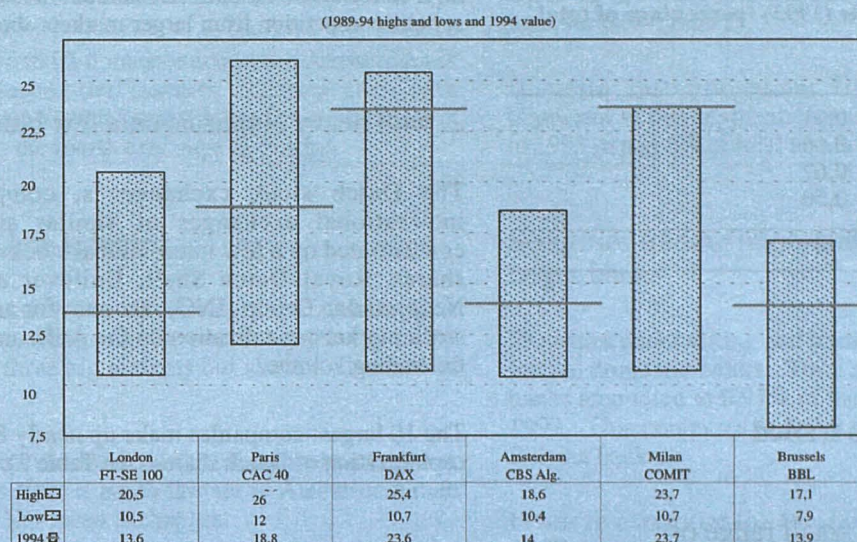
**Table 2**

**Major Dutch shares: Market capitalization and turnover**

	Market capitalization	Market capitalization (% of total)	Turnover shares ASE	Turnover shares ASE	Turnover/market capitalization	Turnover options EOE (underlying volume)	Turnover options/shares EOE in % of ASE
Royal Dutch Shell	109,4	32,2	34,6	14,1	0,3	16,3	47,0
Unilever	36,0	10,6	19,1	7,8	0,5	11,1	58,0
ING	24,7	7,3	13,3	5,4	0,5	5,0	38,0
ABN AMRO	21,0	6,2	13,6	5,5	0,7	4,3	32,0
Robeco	14,5	4,3	1,8	0,7	0,1		
Polygram	13,9	4,1	3,0	1,2	0,2	0,2	5,0
Philips	13,0	3,8	12,3	5,0	0,9	5,3	43,0
Elsevier	11,9	3,5	8,6	3,5	0,7	1,4	16,0
Aegon	10,8	3,2	5,1	2,1	0,5	0,9	18,0
Rorento	10,6	3,1	3,5	1,4	0,3		
Top 5	205,6	60,6	82,3	33,4	0,4		
Top 10	265,8	78,3	114,8	46,6	0,4		
Total	339,4	100,0	246,3	100,0	0,7		

Source: ASE, EOE (European Options Exchange), own calculations.



**GRAPH 3: Stock exchanges: Price/earnings ratios**

Source: Datastram, BBL.

are 10-year bonds. Government bond trading has exploded over the recent years; from 1991 to 1993 it grew by not less than 140%. However, government bond issuing and trading is typically low-fee business which cannot replace share trading neither for the exchange nor for the banks.

### Underrepresentation of industrial and financial companies ...

The large weight of Royal Dutch Shell and Unilever gives the ASE a very distinct industry structure. Shares of the financial services sector, and of cyclical industrial and so-called 'growth' stocks, are underrepresented. Basic producer goods stocks and consumer goods are overrepresented.

... causes lower volatility and prices

Consequently, Dutch shares are less cyclical than other European exchanges. This translates into a lower price-earnings ratio and normally lower volatility than on most other international exchanges. However, in the last two years, Dutch shares showed a higher degree of volatility than those on other European markets (see Graphs 3 and 4).

## 4. Institutional investors

Few dominant players on the Dutch financial markets ...

As on the supply side — the number of different available securities — the demand for Dutch shares is equally concentrated on relatively few potential investors. The presence of large institutional investors on the financial markets of the Netherlands is much more pronounced than in most other EU Member States (see Table 3).

These are in particular large pension funds,<sup>1</sup> including the civil servants' Algemeen Burgerlijk Pensioenfonds (ABP), and large insurance companies,<sup>2</sup> such as ING<sup>3</sup> or Aegon.

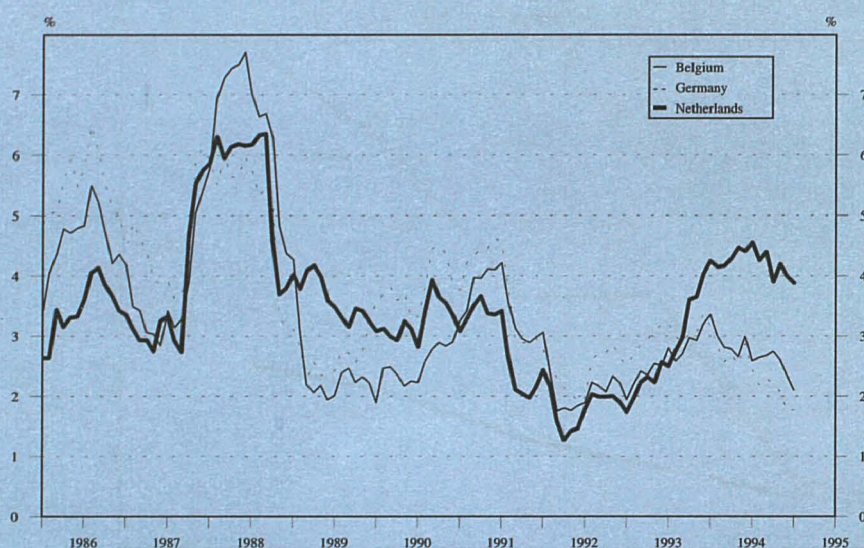
<sup>1</sup> Dutch company and public-sector old-age pension entitlements are, unlike in other countries, actually funded and managed either by company or by sectoral pension funds.

<sup>2</sup> Direct premium income of Dutch life insurance accounted for 4,28% of GDP in 1992, compared to an EU average of just 3,16%.

<sup>3</sup> More precisely, this is a financial conglomerate consisting of large banking and insurance operations.



GRAPH 4: Volatility of share prices, monthly values, moving averages



Source: Eurostat, own calculations.

The combined balance sheet of Dutch institutional investors is, as a percentage of GDP (128,7% in 1992), much larger than that in other Member States or in the USA.

#### ... increasingly investing in securities

Furthermore, these institutional investors have in the past considerably switched their portfolio structure away from direct loans into securities' holdings. Thus, the amount of securities grew much faster than underlying asset volume (see Graph 5).

However, the proportion of securities held to total assets continues to amount to only around 30% (see Graph 6).

Thus, Dutch institutional investors have recently been a main driving-force in the demand for Dutch securities. The bulk of these securities are invested in domestic securities, and in particular government bonds (around 30%).

However, portfolios of domestic shares (around 25%) and foreign securities (around 33%) are also considerable and growing further, both absolutely and relatively (see Graph 5).

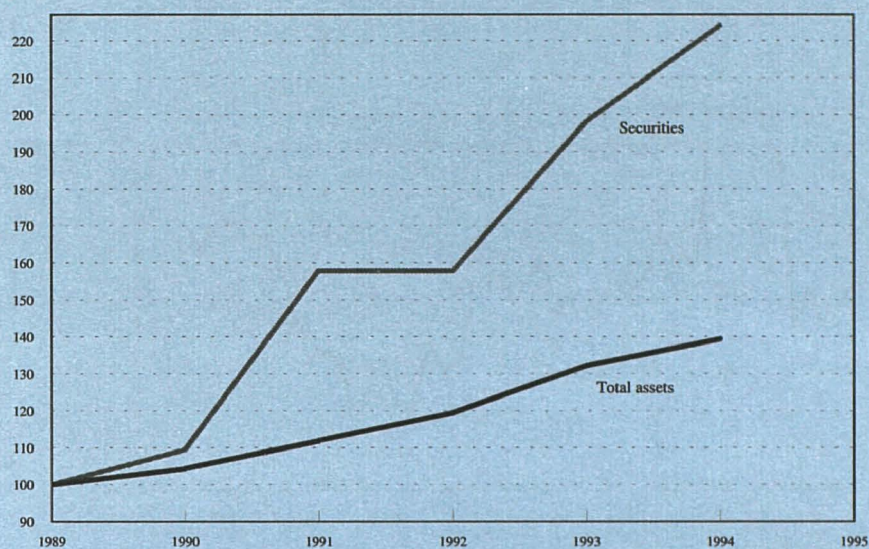
Table 3

**Institutional investors: Balance sheet structure (as a % of GDP, 1992)**

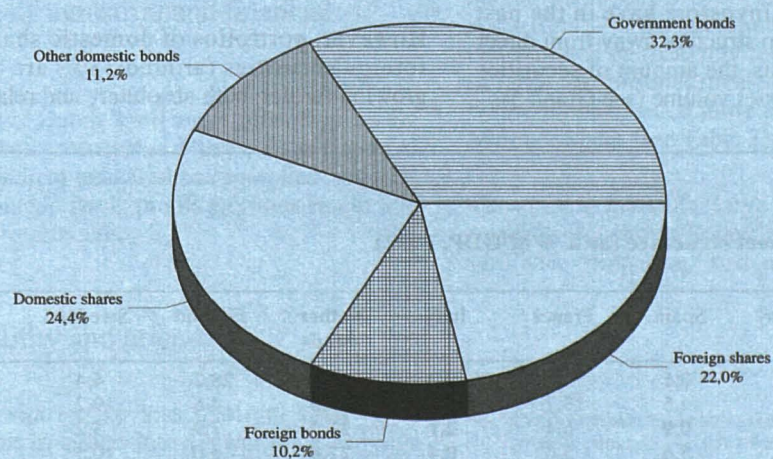
	Germany	Spain	France	Italy	Nether-lands	Finland	Sweden	Japan	USA (1991)
Long-term loans	7,7	0,6		0,2	<b>63,2</b>	28,2	4,4	15,8	5,6
Bonds	7,9	4,5	13,7	5,5	<b>26,5</b>	4,6	19,2	6,1	36,8
Shares	3,1	0,9	6,4	2,1	<b>21,7</b>	7,9	5,2	7,9	29,7
Others	11,0	5,6	5,6	0,4	<b>22,8</b>	8,0	10,5	7,6	13,3
Total	29,6	11,7	25,6	8,2	<b>134,2</b>	48,8	39,3	37,3	85,3

Source: OECD, financial accounts; DG II.



**GRAPH 5: Dutch institutional investors: Asset volume (1989 = 100)**

Source: De Nederlandsche Bank, own calculations.

**GRAPH 6: Securities held by Dutch institutional investors (end 1994, in per cent of total securities)**

Source: De Nederlandsche Bank, own calculations.



**Box: The Algemeen Burgerlijk Pensioenfonds**

The Algemeen Burgerlijk Pensioenfonds (ABP) is the Dutch civil servants' pension fund. Its primary task is to provide, to its nearly one million affiliates, old-age, survivors, early retirement and invalidity pensions.

**Table 4**  
**Main figures on ABP**

	1992	1993	1994
Total assets (billion HFL)	171,2	177,16	185,23
(% of GDP)	30,40	30,85	30,86
Gross investment (billion HFL)	23,45	24,54	34,02
Net investment (% of total supply on capital markets)	9,7	4,6	7,2
Investment yield (billion HFL)	12,46	13,44	13,50
(% of GDP)	2,21	2,34	2,25

Source: ABP, De Nederlandsche Bank, own calculations.

This large number of the affiliates makes ABP the largest biggest institutional investor on the Dutch capital markets, with around 26% of total assets of Dutch institutional investors.

As funding of States' liabilities *vis-à-vis* pensioners is not the rule in other European countries, respective counterparts do not exist in

these other countries, and, consequently, ABP's size makes this fund quite a unique player on the European capital markets. On the basis of these figures it is the largest pension fund and one of the top 10 overall institutional investors.

ABP's total invested assets amounted, at the end of 1993, to around HFL 177 billion.

ABP has traditionally strongly invested in domestic fixed-income financial assets, mostly in loans, and increasingly in bonds. The most important debtor is the Dutch Government.

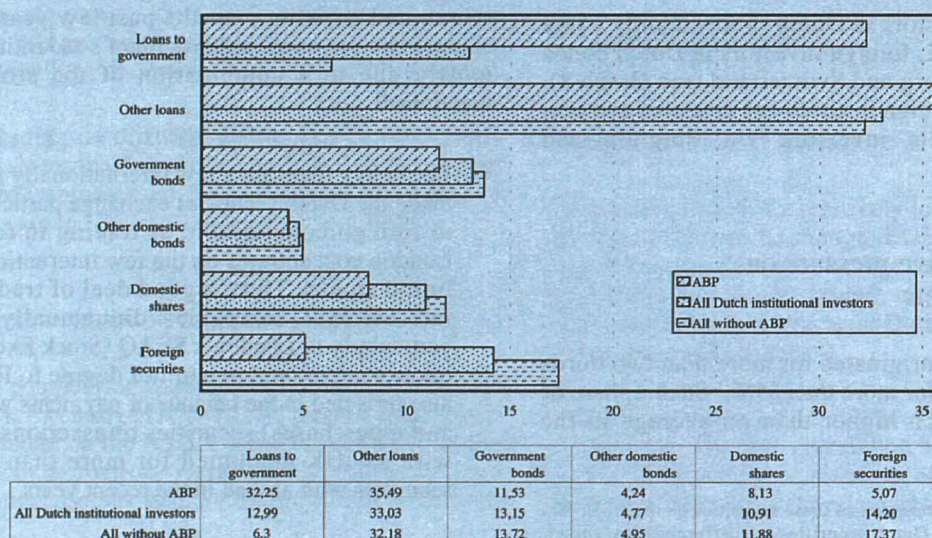
Investment in foreign securities is at present quite low (see Graph 6). Foreign securities accounted, at the end of 1993, only for little more than 5% of total investment, as compared to around 18% of total industry average (without ABP). Of these ABP foreign securities, most are shares, allocated in Europe and in the USA (each around 40%), and Japan.

**Privatization will affect asset allocation...**

At present, ABP is a separate and independent fund, but continues to be in public ownership and under public control with special rules. In February 1993 the government took the decision to fully privatize ABP, and to submit it to existing regulations<sup>1</sup> governing other Dutch pension funds. This decision will be effective from 1 January 1996. This privatization will mean that present restrictions on the asset allocation within ABP will cease to exist. In particular, the restrictions on investment in shares and in foreign securities will cease to exist.

<sup>1</sup> Pensioen- en Spaarfondsenwet (Pension Fund and Savings Fund Act).

**GRAPH 7: ABP, asset allocation (in per cent of total assets (1993))**



Source: ABP, De Nederlandsche Bank, own calculations.



ABP has announced its intention to change its geographical mix of share holdings. For this reason it intends<sup>1</sup> to invest around two thirds in foreign and one third in Dutch shares in the coming years.

**... and increase holdings especially in foreign securities**

Were ABP to change its asset allocation structure after its privatization and adjust it to the present industry average, then quite large volumes of financial assets would have to be reallocated. In

particular, the increase of foreign securities to industry standards<sup>2</sup> would mean that ABP would be a net buyer of foreign shares and bonds to the value of more than HFL 21 billion. Domestic securities would, although to a lesser extent, be added to the ABP portfolio. This reallocation would be exclusively at the expense of loans to the Dutch Government. If ABP had invested less in government securities (especially direct loans to government, of which it has around 64% amongst Dutch institutional investors), as the average of other Dutch institutional investors, it would have released HFL 42 billion from its portfolio.

<sup>1</sup> As indicated in its 1993 annual report.

<sup>2</sup> This is a conservative estimate, as over the next few years, the share of foreign securities held by Dutch institutional investors is expected to increase further.

## 5. Foreign investors increasingly dominating

### Fast growth ...

As the Dutch economy and financial markets have traditionally been very open and relatively small, foreign demand is strong on Dutch securities markets, and has further grown in recent years.

### ... fuelled by institutional investors and tax-avoiders ...

Major international investors in Dutch shares mainly come from the USA and the UK, foreign investors in Dutch bonds from Belgium, Luxembourg and Switzerland (see Graph 8). These are mostly large foreign institutional investors and tax-evading Dutch residents investing via Belgium and Luxembourg.

### ... increasing competitive pressure on Dutch securities markets

In 1993 trading in bonds originated for more than two thirds already abroad, in shares for more than 55%.<sup>1</sup> Such a share of foreign investors is much higher than on average in the

<sup>1</sup> Respective shares in gross turnover of these securities on the ASE. The effective net purchases of Dutch securities are different from shown, particularly for foreigners there are large swings; after three years of net selling (1990-92: HFL -10 billion), in 1993 foreigners were strong net purchasers (HFL + 6,4 billion) of Dutch shares; net demand for Dutch bonds increased sharply in 1993 (to HFL 16,6 billion) from the previous year's level (HFL 9,9 billion).

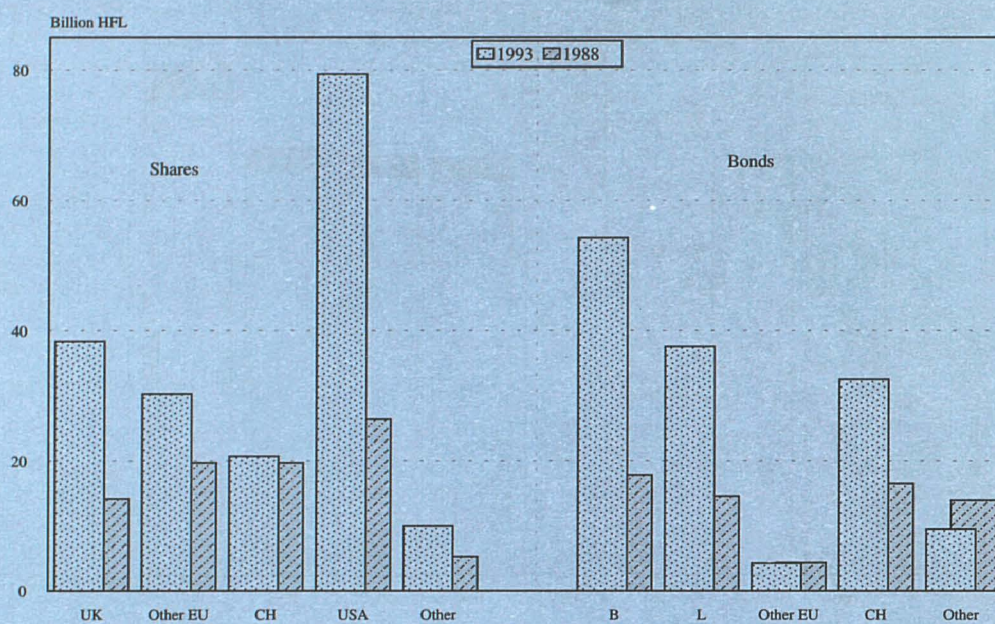
international markets. The amount of foreign-owned Dutch securities has strongly increased over the past few years, and with it the potential competition from exchanges abroad, as more often these investors tend to enter into transactions on their home market, if possible.

## 6. International competition

### London as the viable alternative for Dutch securities trading ...

Foreign competition for trading in Dutch securities has been strong and growing over the past few years, adding to the competitive pressure on Amsterdam's securities market. This is mostly due to a combination of the structural features mentioned:

- The heavy focus on a few internationally traded blue chips made the Dutch securities exchange particularly vulnerable to foreign competition, as trading in foreign shares in London concentrates on the few internationally traded and liquid stocks. Thus, a good deal of trading in these big international companies did actually move abroad, particularly to London's SEAQ (Stock Exchange automatic quote system) and to a minor degree to Frankfurt. This is also reflected in the balance of payments where gross (sales and repurchases) securities transactions in Dutch shares with the UK amounted for more than 550% in Dutch securities with abroad in the recent years.
- The high concentration on the demand side, within large domestic institutional investors and large foreign investors, has let the market move easily to places where the trading structure best matched their interest.

**GRAPH 8: Foreign holdings of Dutch securities**

Source: De Nederlandsche Bank.

- The specifics of market organization on the ASE also contributed to its eroding market share: Trading on the ASE used to be only order-driven;<sup>1</sup> however, trading of large volumes (particularly between institutional investors) prompted quote-driven trading, where those market participants could enter their ask and bid prices and look for a counterparty willing to contract within this offered spread.

Figures about trading on different exchanges have not been consistent, but it seems that before the changes on share trading on the ASE were implemented, SEAQ's share of trading in Dutch stocks was around 36% in 1992 and 31% in 1993.<sup>2</sup>

### ... with additional competition in the future

Further growing competition could in the future stem from the New York Stock Exchange (NYSE). At the moment seven companies are traded on the NYSE, some of them only in the form of American depository rights (ADR). However, the NYSE has announced plans to increase the number of Dutch

shares on its exchange, and out of a list of around 20 to 30 company shares, at least five should be introduced in New York over the next two to three years.

## 7. Derivatives trading

### Long-established exchange ...

Derivatives have for a relatively long time been traded on the European Options Exchange (EOE), which still is one of the largest European markets for stock options. In 1993, of the total 13,5 million contracts traded, more than 90% were directly options or futures contracts on Dutch individual shares (nearly 60) or indices (EOE index).

Trading in interest rate derivatives<sup>3</sup> does not play a major role on the ASE. The high correlation between Dutch and German interest rates and the existence of efficient derivatives markets for the latter prevents the emergence of a liquid corresponding

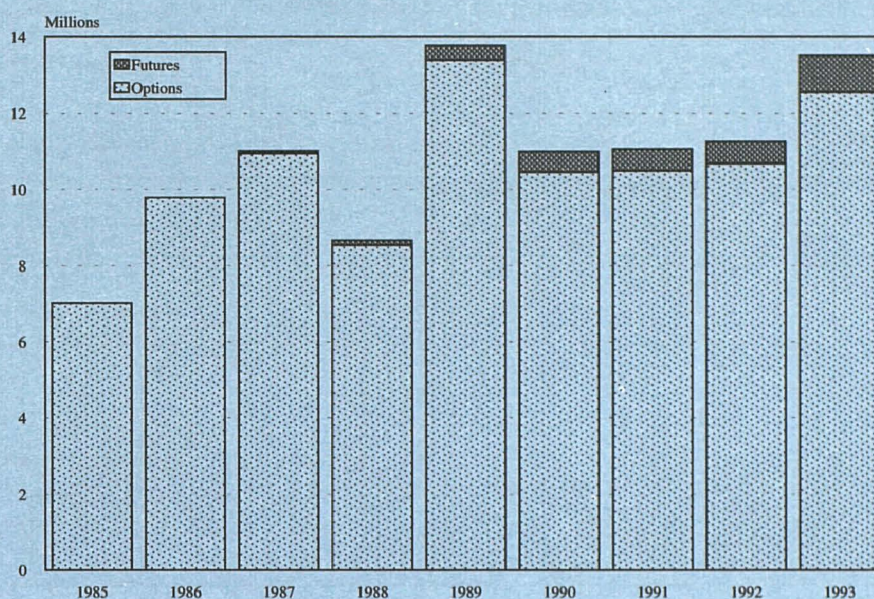
<sup>1</sup> Market-clearing through the matching of orders for purchases and sales at a derived market-clearing price.

<sup>2</sup> According to other estimates around 45% of share transactions and 80% of bond transactions were completed via SEAQ.

<sup>3</sup> Typically government bond and government note futures contracts and options on these futures contracts.



GRAPH 9: European Options Exchange, number of contracts traded



Source: EOE.

Table 5

## European Options Exchange: Contracts traded

	(in % of total)		
	1992	1993	1994
Stock options	60,5	59,5	57,9
Stock index options	26,2	23	23,7
Other options (currencies, bonds, metals)	8,2	10,4	10,2
Stock index futures	4,8	6,4	8,0
Other futures	0,3	0,7	0,2
Total	100	100	100
Total in million contracts	11,26	13,51	13,72

Source: EOE.

... growing relatively slowly

The development of the European Options Exchange has been in some contrast to the development of the cash market on the ASE. The past years were marked by considerable growth of turnover on this exchange. The general world-wide trend to trading in derivatives might have added to this picture, as well as the lack of direct foreign competition, and an advanced and efficient trading system on the EOE, which combined computer trading with floor trading.

The result of these factors is that trading in stock options (amount of underlying volume) has reached about 30-50% of the respective volume on the ASE for the major international shares. For all EOE-noted shares this ratio to trading volume on the ASE reached 32% in 1993.<sup>1</sup>

However, the increase in trading volume on the EOE has clearly lacked the momentum experienced on the other major

market in Dutch interest rate derivatives. Unlike other large derivatives markets, such as LIFFE (London), DTB (Frankfurt) or MATIF (Paris), the Amsterdam market is mainly based on trading in stock options.

<sup>1</sup> This is much higher for the 'blue chips', e.g. Royal Dutch Shell: 47%, Unilever: 58%, Philips: 43%.



European derivatives markets. Whereas on markets such as DTB, LIFFE or MATIF, overall volume has already been considerably higher than on the EOE,<sup>1</sup> growth rates in trading continue to exceed those experienced high compared to trading on the ASE which seems to have reached a certain level. Thus, in relative terms the ASE is running the risk of losing influence on European derivatives trading.

It might even be conceivable that trading in Dutch interest or stock index derivatives eventually switches to a larger market at a later stage, leaving Amsterdam with the relatively less dynamic segment of options on individual Dutch stocks.

## 8. Measures for reform

This combination of heavy concentration on a few internationally traded securities, together with an extraordinarily strong influence of foreign and domestic institutional investors, facilitated the migration of trading securities to larger exchanges abroad.

The perception has grown in the Amsterdam financial community that without significant changes in the organization of stock-trading, institutional investors will continue to leave the ASE and thus erode the core of the Amsterdam financial centre.

Consequently, with the support of the overwhelming majority of the financial community, significant changes took place in 1993 and 1994:

### Modernization of the bond market ...

Early in 1994, on the bond trading side, the 'Amsterdam treasury bond market' (ATM) was opened to foreign-based brokers. Thus, 16 foreign-based banks established electronic links with the ASE through ATM and can fully participate in the market. Market presence has been fully separated from physical presence. Furthermore, the uniform market was split up into a wholesale segment and a retail segment. Trading in the wholesale sector is quote-driven, as on SEAQ, while the retail sector remains order-driven.

... later followed by an overhaul of equity trading...

This step was extended to the whole exchange later that year:

The Amsterdam Stock Exchange introduced further sweeping reforms of its trading system by 30 September 1994. As from this date, stock trading and non-government bond trading is divided equally into two distinct segments, one for wholesale and another for retail business.

The retail segment will build on the former general system of an order-driven floor screen, where the respective floor brokers attempt to match the client orders by setting the market-clearing price for the security. Market makers ('hoekman') are responsible for maintaining an orderly market.

The new element is the wholesale market segment. It is fully computerized and based on two systems:

1. The automatic interprofessional dealing system Amsterdam (AIDA) serves as an order-driven system for dealer-to-dealer transactions, meaning the inner core of the professional market, allowing qualified participants ('hoekman', stockbrokers, clearing members) to enter into arbitrage transactions or book-balancing operations in a very efficient way. In practice, only the most active shares and bonds are executed via AIDA. Participants remain anonymous when entering into transactions.
2. The Amsterdam Stock Exchange trading system (ASSET) is a fully screen-based offer display system. It is open to non-dealers as well, as it allows the dealers to look via this system for clients and make the deals. This system is quote-driven, i.e. it starts from a certain asking and offering price for a security, and looks for clients willing to enter into a transaction at this price. Again, quotes via ASSET are only given by market makers for a few very liquid stocks.

The latter system only covers a small list of internationally traded government bonds and stocks, which account for the vast majority of deals in Dutch securities.

This introduction of a separate wholesale market with new and distinct trading systems and trading rules is meant to challenge the role of the international segment of London's SEAQ which had attracted an increasing share of Dutch securities' trading.

This reform demonstrates the determination of the participants in the Amsterdam financial markets to fight the erosion of Amsterdam as a financial centre. It is certainly a useful step towards keeping wholesale business in the Netherlands and it

<sup>1</sup> In terms of number of contracts traded in 1994, LIFFE is about 11 times larger, MATIF about eight times and DTB about four times. Growth rates 1990-94: LIFFE: 303%, MATIF: 151%, DTB: 293% and EOE just about 25%.

will end the situation where SEAQ was the only market ready for wholesale transactions in Dutch securities.

As a further step, ASE is seeking official recognition as an organized exchange in the neighbouring countries the UK, France, Germany and Belgium. When this recognition is granted, ASE intends to place screens in these countries, with which foreign participants can place orders directly with the exchange. This should further enhance turnover on the exchange.

Furthermore, in June the settlement period for bonds and equities settled through the Amsterdam Effectenclearing will be reduced from seven calendar days to three business days (T+3), in line with recommendations from international bodies.<sup>1</sup>

The separation of trading into a wholesale and retail segment left the latter basically unchanged, when compared with the previous general system. As an attempt to also improve trading conditions in this segment, ASE decided to start, in the summer of 1995, with the publication of 'best-bid' and 'best-ask' prices and trading volume also in this area, in order to make the retail sector more transparent and efficient. However, this innovation will make the linking of information transmission companies (for example Reuters, Telerate, Bloomberg) with the exchange necessary.

### ... and some progress in derivatives trading

The European Options Exchange (EOE) has independent plans to boost trading on its exchange. At present, EOE members have to channel all their trades via the exchange. Thus 'off-the-floor' transactions are forbidden by this group. However this rule should be repealed and such off-the-floor transactions should even be allowed to be settled via the exchange settlement system. The EOE hopes to keep at least this settlement business linked to the increasing number of over-the-counter transactions and to maintain the floor also as the reference for over-the-counter business between large institutional investors.

## 9. Preliminary results and outlook

Amsterdam has considerably modernized its securities markets and done most of what is under its control to stay competitive and remain a big player in international securities trading.

Whether the reforms are able to stop, or even turn around, the continuing erosion of market share of ASE will have to be seen and will partly depend on the respective overall trading costs and the progress of eventual supporting reforms in Amsterdam, such as the integration of the cash and derivatives market. The French and German markets, although with a considerably larger domestic client basis, have in the past succeeded with similar reforms in reversing market share losses to London.

According to preliminary figures provided by NatWest<sup>2</sup> ASE was successful in winning back some market share. Between October 1994 (when the reforms became effective) and January 1995, SEAQ's market share in trading Dutch shares dropped to 28-31%, from a range of 33-39% in the same period the previous year.

However, the Dutch securities markets will most likely continue to pay a price for (1) their high concentration of effectively traded securities and investors, and (2) the fact that securities trading in Europe tends to start concentrating on a few big and thus liquid markets, considerably bigger than Amsterdam could possibly ever be.

Two possible developments might pose further challenges to the Amsterdam financial community; the overcoming of some remaining inefficiencies in securities trading and settlement of its major competitors, and the introduction of a single currency, which would most likely enhance the concentration of at least bond trading on two or three European major markets.

Thus, in the longer term, Amsterdam will probably complement its strategy of modernizing its market structures with focusing on certain European market niches and building on the underlying strength of its financial markets beyond securities trading.

<sup>1</sup> Such as, in 1989, the Group of Thirty or the International Federation of Stock Exchanges and the ISMA.

<sup>2</sup> *Het Financieele Dagblad*, 22 February 1995, p. 1.

## **Statistical Annex**





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Table 1

**Main economic indicators, 1961-95<sup>1</sup>**  
**(annual percentage change, unless otherwise stated)**

	1961-73	1974-86	1987	1988	1989	1990	1991	1992	1993	1994	1995
1. Gross domestic product at current market prices	11,2	7,1	0,7	3,8	6,0	6,5	5,0	3,8	2,0	4,7	5,5
at 1985 market prices	4,8	1,9	1,2	2,6	4,7	4,1	2,3	1,3	0,3	2,5	3,2
2. Gross fixed capital formation at 1985 prices											
total	5,3	0,3	0,9	4,5	4,9	1,6	0,2	1,1	-2,2	2,4	6,9
construction	:	-1,2	2,0	9,5	2,3	0,0	0,0	1,9	-3,2	3,7	4,6
equipment	:	2,9	0,4	-2,5	7,9	3,7	0,6	0,4	-1,0	0,9	9,9
3. Gross fixed capital formation at current prices (% of GDP)											
total	25,7	20,5	20,8	21,3	21,5	20,9	20,4	20,3	19,7	19,6	20,2
general government	:	3,4	2,6	2,7	2,6	2,7	2,7	2,7	2,7	2,7	2,7
other sectors	:	17,1	18,2	18,6	18,9	18,3	17,7	17,6	17,0	16,9	17,5
4. Final national uses including stocks at 1985 prices	4,9	1,6	1,4	1,8	4,6	3,5	1,8	1,2	-0,5	2,1	3,4
relative against 19 competitors	0,2	-0,3	-2,0	-2,6	1,2	0,5	0,3	0,3	0,8	-0,3	0,7
relative against other member countries	0,3	-0,1	-2,0	-2,7	1,1	0,3	0,1	0,4	1,6	-0,1	0,7
5. Inflation											
price deflator private consumption	5,0	5,3	0,2	0,5	1,2	2,2	3,2	3,0	2,1	2,2	1,8
price deflator GDP	6,0	5,1	-0,5	1,2	1,2	2,3	2,7	2,6	1,6	2,1	2,2
6. Compensation per employee											
nominal	11,4	6,3	1,4	0,9	0,7	3,2	4,5	4,8	3,3	1,9	2,3
real, deflator private consumption	6,0	1,0	1,2	0,3	-0,5	1,0	1,2	1,7	1,2	-0,2	0,6
real, deflator GDP	5,0	1,1	2,0	-0,3	-0,5	0,9	1,7	2,2	1,6	-0,2	0,2
7. GDP at 1985 market prices per person employed	3,9	1,9	-0,5	1,0	2,7	1,7	0,9	0,4	0,5	2,5	2,0
8. Real unit labour costs 1961-73 = 100	100,0	102,0	96,7	95,4	92,4	91,7	92,4	94,1	95,2	92,6	91,0
annual % change	1,0	-0,8	2,5	-1,3	-3,1	-0,8	0,8	1,8	1,2	-2,7	-1,8
9. Relative unit labour costs in common currency against 19 competitors											
1961-73 = 100	100,0	115,4	107,5	104,6	98,4	98,8	96,9	100,1	103,4	103,1	106,6
annual % change	2,9	-0,9	4,0	-2,7	-5,9	0,4	-1,9	3,2	3,3	-0,3	3,4
against other member countries											
1961-73 = 100	100,0	115,3	107,8	105,3	99,6	97,4	96,0	98,4	104,2	104,4	107,4
annual % change	2,7	-0,7	2,3	-2,4	-5,4	-2,2	-1,4	2,5	5,9	0,2	2,9
10. Employment	0,9	0,0	1,7	1,6	1,9	2,3	1,3	0,9	-0,1	0,0	1,3
11. Unemployment rate (% of civilian labour force)	1,1	7,2	8,1	7,6	6,9	6,2	5,8	5,6	6,6	7,0	6,9
12. Current balance (% of GDP)	0,5	2,0	1,9	2,8	3,5	3,8	3,5	3,1	3,7	4,6	4,7
13. Net lending (+) or net borrowing (-) of general government (% of GDP)	-0,8	-4,0	-5,9	-4,6	-4,7	-5,1	-2,9	-3,9	-3,3	-3,1	-3,2
14. General government gross debt (end of period; % of GDP)											
Maastricht definition	39,3	73,5	76,1	79,2	79,2	78,8	78,9	79,9	81,4	78,1	78,1
15. Interest payments by general government (% of GDP)	:	4,3	6,4	6,3	6,0	6,0	6,2	6,3	6,5	6,0	5,8
16. Money supply (end of year) <sup>2</sup>	10,3	8,3	4,1	9,8	12,0	7,7	5,2	6,3	7,7	-0,3	:
17. Long-term interest rate (%)	5,9	9,2	6,4	6,3	7,2	9,0	8,7	8,1	6,7	7,2	7,5
18. Profitability (1961-73 = 100)	100,0	76,7	77,3	78,7	85,0	87,9	86,5	82,3	78,5	83,7	88,2

<sup>1</sup> 1961-93: Eurostat and Commission services; 1994-95: Economic forecasts spring 1995.<sup>2</sup> M3.

**Table 2****Gross domestic product: GDP and its demand components at constant market prices<sup>1</sup> (% change over previous year)**

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Private consumption	-1,4	0,7	0,8	2,4	2,6	2,7	0,8	3,5	4,2	3,1	2,6	0,7	1,5	2,3
Public consumption	0,4	1,0	-0,8	1,3	3,6	2,6	1,4	1,5	1,6	1,5	1,3	0,1	1,0	1,8
Gross fixed capital formation	-4,3	1,9	5,2	6,7	6,9	0,9	4,5	4,9	1,6	0,2	1,1	-2,2	2,4	6,9
of which: equipment	-0,3	9,8	8,8	15,5	8,8	0,4	-2,5	7,9	3,7	0,6	0,4	-1,0	0,9	9,9
residential construction	:	:	:	:	4,2	1,6	11,3	0,7	-2,5	-5,4	3,9	-0,5	8,0	5,8
Stockbuilding (% of GDP)	0,8	0,6	0,3	0,1	0,2	-0,9	0,2	1,0	0,2	-0,3	-0,8	-0,5	0,4	0,2
Total domestic demand	-0,6	2,3	3,8	4,0	3,0	2,1	4,2	5,4	4,1	2,9	1,8	0,3	3,5	4,1
Exports of goods and services	-0,3	3,3	7,2	5,3	1,8	3,6	9,0	6,7	5,3	4,7	2,8	1,7	5,9	5,2
Imports of goods and services	1,1	3,9	5,0	6,5	3,5	4,2	7,6	6,7	4,2	4,1	2,7	0,2	5,6	5,8
GDP	-1,4	1,4	3,1	2,6	2,7	1,2	2,6	4,7	4,1	2,3	1,3	0,3	2,5	3,2

<sup>1</sup> 1990 prices.

1994 and 1995: Commission services forecasts spring 1995.

Source: Commission services.

**Table 3****Wages, productivity and terms of trade (% change over previous year)**

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Nominal wages per employee	5,8	3,2	0,2	1,4	2,1	1,4	0,9	0,7	3,2	4,5	4,8	3,3	1,9	2,3
Private consumption prices	5,5	2,9	2,2	2,2	0,3	0,2	0,5	1,2	2,2	3,2	3,0	2,1	2,2	1,8
Real wages (deflated by private consumption prices)	0,2	0,2	-1,9	-0,8	1,8	1,2	0,3	-0,5	1,0	1,2	1,7	1,2	-0,2	0,6
Productivity (real GDP/person employed)	1,1	3,3	3,2	1,0	0,7	-0,5	1,0	2,7	1,7	0,9	0,4	0,5	2,5	2,0
Unit labour costs, whole economy	-1,3	-2,0	-4,6	-1,4	1,3	2,5	-1,3	-3,1	-0,8	0,8	1,8	1,2	-2,7	-1,8
Terms of trade (goods and services)	2,8	-0,3	-0,2	0,2	1,2	-1,7	1,0	-0,3	0,5	-0,3	-0,3	-0,1	0,4	1,0
Adjusted wage share	-0,9	-1,3	-2,9	-0,9	0,8	1,5	-0,8	-1,9	-0,5	0,5	1,1	0,7	-1,6	-1,0

1994 and 1995: Commission services forecast spring 1995.

Source: Commission services.

**Table 4****Contributions to the change of the deflator of final uses**

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Import prices	0,5	0,1	1,9	0,4	-6,0	-1,0	-0,1	1,6	-0,4	0,1	-0,7	-0,9	0,2	-0,2
of which: exchange rate <sup>1</sup>	-1,5	-0,7	0,6	0,0	-2,7	-1,6	0,2	0,4	-1,3	0,3	-0,8	-0,8	-0,1	-1,4
Unit labour costs	-0,6	-1,3	-2,1	-1,1	-0,7	-0,3	-0,7	-1,6	-1,1	-0,4	0,2	0,1	-0,2	-0,4
Net indirect taxes	0,0	0,1	0,1	0,1	0,3	-0,1	0,2	0,0	0,3	0,1	0,5	0,4	0,5	0,6
Gross operating surplus <sup>2</sup>	1,9	1,2	2,4	0,9	-0,8	-1,1	0,7	1,6	0,6	0,3	-0,5	-0,4	1,2	0,7
Total: deflator of final uses, % change	4,4	1,4	3,2	1,6	-5,9	-1,3	0,7	2,4	1,1	1,9	1,0	0,2	1,6	1,2

<sup>1</sup> Influence of changes in the nominal effective exchange rate *vis-à-vis* 19 partners, double weighted for exports.

<sup>2</sup> Enterprises profits and income of the self-employed.

1994 and 1995: Commission services forecast spring 1995.

Source: Commission services.

**Table 5****Saving and investment in some EC countries (1993, as a % of GDP)**

	Private sector saving	Private sector investment	Difference	Public sector saving	Public sector investment
Belgium	27,1	16,3	10,8	-4,8	1,5
West Germany	19,6	17,1	2,5	0,8	2,2
France	20,8	15,2	5,6	-2,6	3,4
Italy	23,7	14,4	9,3	-5,7	2,6
Netherlands	23,3	17,0	6,3	-0,1	2,7

Source: Commission services.



**Table 6****Balance of payments (as a % of GDP)**

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Current account														
on transaction basis	2,1	3,3	3,0	3,9	4,0	2,8	1,5	2,3	3,6	3,7	2,7	2,3	3,3	:
2. Trade balance	2,6	3,4	3,2	4,3	4,2	4,0	2,4	3,7	3,5	3,6	3,7	3,6	4,2	:
of which: energy balance	-1,3	-0,8	-0,8	-0,7	0,2	1,4	-0,1	-0,4	-0,5	-0,2	0,2	-0,0	:	:
3. Services	0,8	0,9	0,5	0,6	0,4	-0,3	0,1	-0,1	0,8	1,1	0,5	0,4	0,6	0,5
4. Factor income	-0,4	-0,2	0,0	-0,2	0,2	0,0	-0,1	-0,5	0,1	0,0	0,0	-0,2	-0,0	0,5
5. Transfers	-1,0	-0,9	-0,7	-0,8	-0,8	-0,9	-0,9	-0,8	-0,8	-1,0	-1,4	-1,3	-1,5	-1,6
6. Current account														
on cash basis	1,5	2,9	2,0	3,1	3,3	2,4	1,0	0,8	2,6	2,6	1,5	1,8	3,5	2,5
7. Capital movements	-1,6	-2,7	-1,4	-2,9	-2,4	-5,2	-0,8	0,5	3,4	-1,7	-2,1	-6,6	-2,3	-4,9
8. Capital transfers	-0,2	-0,2	-0,1	-0,1	-0,0	-0,1	-0,1	-0,1	-0,2	-0,1	-0,1	-0,2	-0,2	-0,3
9. Long-term capital,														
non-banking private sector	-0,7	-1,5	-0,7	-2,2	-1,5	-3,7	-0,3	1,7	3,2	-2,0	-1,7	-5,1	-1,2	-5,8
10. Short-term capital, non-														
banking private sector	-0,3	-0,9	-0,5	-0,4	-0,7	-1,0	-0,3	-0,8	0,5	0,6	-0,3	-1,1	-0,8	0,8
11. Public sector	-0,3	-0,2	-0,1	-0,2	-0,1	-0,3	-0,2	-0,3	-0,3	-0,1	0,0	-0,0	-0,0	0,0
12. Other	0,2	-0,1	0,1	0,3	0,0	-0,8	0,5	-0,5	0,5	-0,3	0,6	2,7	2,5	-0,4
13. Non-monetary operations	0,0	0,1	0,8	0,4	1,0	-3,6	0,7	0,8	6,5	0,7	0,1	-2,0	3,7	-2,8
14. Banking sector	-0,6	1,1	-0,9	-0,5	-0,5	3,4	0,7	-0,1	-6,3	-0,6	-0,0	3,9	-1,6	2,9
15. Change in official														
reserves <sup>1</sup>	-0,5	1,3	-0,1	-0,0	0,5	-0,2	1,3	0,7	0,2	0,1	0,0	1,9	2,2	0,1

<sup>1</sup> increase = +.

Source: De Nederlandsche Bank.

**Table 7****Merchandise trade by SITC sections (as a % of total)**

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Imports</b>														
0. Food and live animals	11,2	11,6	11,8	11,7	11,2	11,1	11,7	11,8	12,7	10,8	10,2	9,9	11,0	11,4
1. Beverage, tobacco	1,4	1,3	1,4	1,4	1,3	1,2	1,4	1,4	1,2	1,2	1,2	1,3	1,4	1,5
2. Crude materials, excluding fuels	6,3	6,2	5,9	5,9	6,0	6,0	5,7	5,5	6,0	6,0	5,5	5,0	4,9	4,9
3. Mineral fuels, lubricants	24,1	26,5	26,0	25,0	24,2	23,3	13,0	12,1	9,7	11,1	11,4	10,6	9,3	9,6
4. Oils, fats and waxes	0,8	0,9	0,9	0,9	1,4	1,2	0,7	0,5	0,6	0,6	0,5	0,5	0,5	0,7
5. Chemicals	8,2	8,6	8,6	8,9	9,5	10,1	10,5	10,7	11,0	11,0	10,4	10,2	10,6	11,7
6. Manufactured goods	15,9	14,4	14,4	14,0	14,4	14,4	16,7	16,4	17,3	17,1	16,9	16,3	15,9	14,8
7. Machinery and transport equipment	19,8	18,8	19,3	21,1	21,3	22,2	27,4	27,9	28,2	29,2	30,3	31,9	31,8	31,2
8. Other manufactures	11,0	10,5	10,2	10,2	9,7	9,8	12,1	12,8	12,8	12,5	13,2	13,9	14,0	14,1
9. Other non-classified	1,3	1,3	1,5	1,0	0,9	0,8	0,7	1,0	0,5	0,6	0,5	0,4	0,5	0,1
<b>Exports</b>														
0. Food and live animals	17,1	18,3	18,2	17,6	16,9	16,1	17,4	18,2	18,1	17,8	17,3	17,2	17,9	18,0
1. Beverage, tobacco	1,6	1,6	1,7	1,7	1,7	1,6	2,0	2,1	1,9	1,8	2,1	2,4	2,5	2,6
2. Crude materials, excluding fuels	5,2	4,7	4,7	4,7	4,8	5,1	5,7	6,0	6,5	6,3	5,6	5,6	5,7	5,6
3. Mineral fuels, lubricants	22,2	24,0	23,9	23,6	23,3	24,0	15,8	11,5	8,7	9,6	9,7	9,9	8,5	9,0
4. Oils, fats and waxes	1,0	0,9	0,9	1,0	1,5	1,3	0,9	0,7	0,7	0,8	0,7	0,7	0,7	0,8
5. Chemicals	15,1	14,7	14,6	15,2	15,2	14,8	15,4	16,3	16,8	15,8	15,1	14,6	15,9	15,9
6. Manufactured goods	13,5	12,6	12,4	12,2	12,3	12,2	13,6	13,9	14,3	13,9	13,2	13,2	13,6	12,4
7. Machinery and transport equipment	16,9	15,8	16,0	16,2	16,0	16,2	19,2	20,5	21,5	22,0	23,7	23,3	23,8	25,0
8. Other manufactures	6,0	5,6	5,8	6,0	5,9	6,2	7,3	7,9	8,0	8,1	8,8	9,4	10,5	10,3
9. Other non-classified	1,4	1,7	1,7	1,8	2,4	2,4	2,8	2,9	3,5	3,9	3,8	3,8	0,7	0,3

Source: Eurostat.

**Table 8****Geographical distribution of external trade (as a % of total)**

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Imports</b>														
EUR 12	54,7	53,5	55,5	55,0	53,6	55,8	61,0	61,5	61,6	60,2	59,9	59,0	58,8	57,7
of which: BLEU	11,6	11,3	11,0	10,7	10,8	11,8	13,4	13,8	14,0	13,3	13,0	13,0	12,9	11,1
Germany	22,2	21,4	22,2	22,0	21,4	21,4	25,2	25,5	25,1	24,1	23,9	23,5	23,0	22,1
Spain	0,8	0,9	1,2	1,3	1,4	1,3	1,4	1,4	1,3	1,2	1,4	1,4	1,5	1,8
France	6,7	6,4	6,5	6,7	6,3	6,4	6,8	7,0	7,5	7,7	7,6	7,0	7,2	7,1
Italy	3,2	3,0	3,0	3,1	2,8	2,9	3,6	3,6	3,6	3,4	3,5	3,4	3,3	3,5
United Kingdom	8,2	8,6	9,4	8,7	8,5	9,7	7,9	7,5	7,4	7,5	7,7	8,0	7,9	9,0
USA	8,8	9,5	9,4	9,3	9,2	8,4	8,0	7,4	7,8	8,6	8,1	8,1	8,2	8,8
Japan	1,9	1,9	2,1	2,3	2,5	2,5	3,6	3,7	3,6	3,5	4,0	5,4	5,4	4,2
OPEC	15,1	14,3	10,7	9,8	9,9	9,4	6,3	5,9	5,3	6,6	6,2	6,1	5,6	5,7
Other	19,5	20,8	22,4	23,6	24,9	23,9	21,1	21,5	21,6	21,1	21,8	21,5	21,9	23,6
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
as a % of GDP	44,6	45,8	44,6	45,2	50,7	53,3	44,6	44,0	45,4	48,9	47,9	47,3	46,0	37,4
<b>Exports</b>														
EUR 12	73,5	72,5	73,7	73,6	73,6	74,6	75,7	75,4	74,7	75,7	76,5	76,2	75,4	72,5
of which: BLEU	15,6	14,9	15,0	15,0	15,0	15,8	15,1	15,6	15,5	15,5	16,3	16,9	17,3	12,5
Germany	30,5	30,1	30,0	30,6	31,7	32,3	30,0	29,3	27,2	27,8	30,2	34,4	34,5	28,5
Spain	1,0	0,9	0,9	0,9	0,7	0,8	1,1	1,5	2,1	2,2	2,5	2,6	2,6	2,4
France	11,0	11,5	11,2	10,7	10,8	10,7	10,6	11,0	11,4	11,3	11,9	12,1	12,1	10,4
Italy	5,6	5,5	5,6	6,0	6,1	6,5	7,0	7,2	7,4	7,3	7,7	7,8	7,9	5,6
United Kingdom	9,1	9,3	9,6	10,0	10,2	10,4	10,3	10,9	12,6	12,3	12,7	11,9	11,5	9,2
USA	2,5	3,2	3,2	4,2	5,0	5,1	4,6	4,3	4,2	4,3	3,9	3,8	4,1	4,3
Japan	0,4	0,5	0,5	0,5	0,6	0,5	0,7	0,8	0,9	0,9	0,8	0,9	0,9	1,0
OPEC	5,4	5,4	5,0	4,5	3,8	3,2	2,6	2,4	2,5	2,2	2,3	2,1	2,3	2,4
Other	18,1	18,4	17,6	17,1	17,0	16,6	16,4	17,2	17,7	16,8	16,4	16,9	17,3	19,9
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
as a % of GDP	42,9	47,6	47,1	48,2	53,3	55,6	47,1	44,6	46,0	50,6	48,0	46,1	43,9	42,4

Source: Eurostat and Centraal Bureau voor de Statistiek.



**Table 9****Labour market indicators**

	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<b>Population</b>												
Netherlands	13 032	14 148	14 488	14 567	14 664	14 760	14 846	14 947	15 068	15 182	15 290	15 387
EUR 15	323 210	338 528	342 188	342 926	343 665	344 821	346 204	348 306	350 363	352 364	354 196	355 427
Netherlands as a % of EUR15	4,0	4,2	4,2	4,2	4,3	4,3	4,3	4,3	4,3	4,3	4,3	4,3
of which 15-64 year-olds, % of total population												
Netherlands	62,6	66,2	68,5	68,8	69,0	69,0	69,0	68,9	68,8	68,7	68,6	68,5
EUR 15	63,2	64,5	66,9	67,0	67,1	67,2	67,2	67,2	67,2	67,1	67,1	67,2
<b>Labour force</b>												
Netherlands	5 211	5 861	6 051	6 168	6 286	6 420	6 518	6 681	6 839	6 970	7 036	7 093
EUR 15	132 371	142 952	147 658	148 726	150 085	151 599	152 816	155 255	156 001	156 224	156 325	156 492
Labour force, % of total population												
Netherlands	40,0	41,4	41,8	42,3	42,9	43,5	43,9	44,7	45,4	45,9	46,0	46,1
EUR 15	41,0	42,2	43,2	43,4	43,7	44,0	44,1	44,6	44,5	44,3	44,1	44,0
<b>Occupied population</b>												
Netherlands	4 844	4 945	4 730	4 828	4 911	4 989	5 084	5 203	5 273	5 318	5 311	5 309
EUR 15	133 012	137 594	135 690	136 617	138 164	140 261	142 387	144 769	144 884	143 834	141 063	140 317
Occupied population, as % of total population												
Netherlands	37,2	35,0	32,6	33,1	33,5	33,8	34,2	34,8	35,0	35,0	34,7	34,5
EUR 15	41,2	40,6	39,7	39,8	40,2	40,7	41,1	41,6	41,4	40,8	39,8	39,5
<b>Unemployment rate</b>												
Netherlands	1,0	6,4	8,4	8,3	8,1	7,6	6,9	6,2	5,8	5,6	6,6	7,0
EUR 15	2,3	5,8	10,0	9,9	9,6	9,0	8,2	7,6	8,1	9,0	10,6	11,1
<b>Wage and salary earners, total economy, Netherlands</b>	4 103	4 320	4 123	4 219	4 299	4 376	4 470	4 585	4 654	4 693	4 666	4 658
Wage and salary earners, general government	579	723	745	750	754	750	746	743	737	732	728	:
Wage and salary earners, private sector	3 528	3 599	3 378	3 469	3 545	3 626	3 724	3 842	3 917	3 961	3 938	:
Wage and salary earners, manufacturing industry	1 196	966	860	872	882	889	902	920	917	907	874	844
<b>Employment, relation persons/man-years</b>	:	:	118	118	119	119	120	120	121	121	122	122
<b>Characteristics of unemployed, Eurostat (harmonized)</b>												
total	46,3	339,8	472,3	500,9	513,1	485,8	452,9	413,3	395,1	394,2	467,0	507,4
of which: males	:	:	257,7	240,3	227,2	217,7	195,9	176,2	168,3	179,7	237,9	265,5
females	:	:	214,6	260,6	285,9	268,1	257,0	237,1	226,8	214,5	229,1	241,9
less than 25 years old	:	:	146,3	171,0	173,2	141,4	129,2	113,9	109,2	112,9	143,8	134,8
long-term unemployed	:	:	330,6	:	272,3	279,1	254,0	233,4	208,7	165,3	202,3	:

Source: Eurostat and Centraal Planbureau.

**Table 10****Government expenditure( billion HFL)**

	Current prices	Constant prices (index 1970 = 100)	Real growth	as a % of GDP
1970	51,8	100,0	8,4	42,7
1971	60,5	108,1	8,1	44,3
1972	69,1	112,9	4,5	44,8
1973	79,2	118,7	5,1	45,0
1974	93,9	128,9	8,6	47,0
1975	114,3	142,5	10,5	52,0
1976	131,2	150,1	5,4	52,1
1977	143,1	153,5	2,3	52,1
1978	158,6	161,3	5,1	53,4
1979	174,0	170,2	5,6	55,1
1980	191,9	177,8	4,4	57,0
1981	208,3	183,0	2,9	59,0
1982	224,9	186,2	1,8	61,0
1983	234,4	190,5	2,3	61,5
1984	240,6	192,0	0,8	60,1
1985	246,6	193,3	0,7	58,0
1986	253,2	198,1	2,5	57,9
1987	261,9	206,0	4,0	59,4
1988	263,6	204,9	-0,5	57,6
1989	265,6	204,0	-0,4	54,8
1990	283,9	213,1	4,5	55,0
1991	301,3	220,2	3,3	55,6
1992	317,3	226,1	2,7	56,3
1993	326,2	228,7	1,1	56,8
1994	331,7	227,7	-0,4	55,2
1995	335,3	225,2	-1,1	52,9

1994 and 1995: Commission services forecast spring 1995.

Source: Commission services.

**Table 11****Government expenditure by category as a % of GDP**

	Gross capital formation		Compensation of employees		Purchases of goods and services		Interest payments		Transfers to households	
	NL	EUR 12	NL	EUR 12	NL	EUR 12	NL	EUR 12	NL	EUR 12
1970	5,1	4,1	11,0	10,1	3,4	4,9	3,0	1,8	17,2	12,1
1971	5,3	4,1	11,5	10,6	3,5	5,1	3,0	1,8	18,3	12,4
1972	4,7	3,9	11,8	10,9	3,1	5,0	2,8	1,7	19,4	13,0
1973	4,2	3,7	11,8	10,8	2,8	5,0	2,9	1,7	20,0	13,1
1974	4,0	3,8	12,3	11,3	3,0	5,3	3,1	1,9	21,3	13,7
1975	4,3	3,9	13,0	12,1	3,3	5,6	3,2	2,1	23,7	15,5
1976	4,1	3,6	12,8	12,1	3,4	5,6	3,1	2,2	24,1	15,8
1977	3,7	3,3	12,8	12,1	3,5	5,5	3,1	2,4	24,7	16,0
1978	3,5	3,1	12,9	12,2	3,7	5,6	3,2	2,6	25,5	16,5
1979	3,4	3,1	13,1	12,1	4,0	5,6	3,3	2,7	26,2	16,3
1980	3,5	3,2	13,0	12,6	3,8	5,9	3,8	3,1	26,8	16,5
1981	3,4	3,0	12,7	13,0	4,0	6,1	4,6	3,7	27,9	17,4
1982	3,1	2,9	12,6	13,0	4,0	6,2	5,3	4,1	29,5	18,0
1983	2,9	2,8	12,2	12,9	4,2	6,2	5,9	4,4	30,0	18,2
1984	3,0	2,8	11,5	12,7	4,0	6,2	6,2	4,7	28,7	17,9
1985	2,8	2,8	11,1	12,5	3,9	6,2	6,4	4,9	27,4	18,0
1986	2,6	2,8	10,9	12,4	3,9	6,1	6,4	4,9	27,0	17,9
1987	2,6	2,7	11,1	12,4	4,1	6,1	6,4	4,6	27,4	17,9
1988	2,7	2,7	10,6	12,1	4,1	6,0	6,3	4,5	27,0	17,5
1989	2,6	2,8	10,1	11,9	4,1	5,8	6,0	4,6	26,2	17,2
1990	2,7	2,9	9,8	12,0	4,0	5,9	6,0	4,7	27,2	17,4
1991	2,7	3,0	9,7	12,3	4,1	6,2	6,2	4,8	27,4	18,2
1992	2,7	2,9	9,9	12,4	4,0	6,4	6,3	5,2	27,9	19,2
1993	2,7	2,8	10,0	12,3	3,9	6,8	6,5	5,4	28,3	20,0
1994	2,7	2,7	9,8	12,0	3,9	6,8	6,0	5,2	27,7	20,0
1995	2,7	2,6	9,6	11,7	3,8	6,7	5,8	5,3	26,6	19,6

	Transfers to the rest of the world		Transfers to enterprises		Net capital transfers		Current transfers		Total expenditure	
	NL	EUR 12	NL	EUR 12	NL	EUR 12	NL	EUR 12	NL	EUR 12
1970	-0,1	0,5	1,9	1,9	1,0	0,8	18,9	14,7	42,7	36,9
1971	0,0	0,5	1,5	1,8	0,8	0,8	19,8	15,0	44,3	37,9
1972	0,1	0,5	1,6	2,0	0,9	0,8	21,2	15,8	44,8	38,7
1973	-0,1	0,5	2,0	2,1	1,2	0,9	21,8	16,0	45,0	38,8
1974	0,2	0,6	2,0	2,3	0,9	0,8	23,4	16,8	47,0	40,6
1975	0,6	0,6	2,0	2,5	1,5	1,0	26,3	19,0	52,0	44,3
1976	0,3	0,6	2,7	2,5	1,3	1,0	27,0	19,2	52,1	44,3
1977	0,4	0,6	2,8	2,6	0,8	1,0	27,7	19,5	52,1	44,5
1978	0,5	0,7	2,9	2,7	0,9	1,0	28,8	20,1	53,4	45,2
1979	0,2	0,6	3,1	2,7	1,5	1,0	29,5	20,0	55,1	45,2
1980	0,4	0,6	3,1	2,7	2,3	1,0	30,2	20,1	57,0	46,5
1981	0,7	0,6	2,8	2,7	2,6	1,2	31,4	21,2	59,0	48,8
1982	0,7	0,7	3,1	2,7	2,5	1,0	33,2	21,8	61,0	49,6
1983	0,5	0,6	3,3	2,7	2,3	0,9	33,8	22,0	61,5	49,8
1984	0,6	0,6	3,6	2,9	2,4	1,0	32,7	21,9	60,1	49,8
1985	0,4	0,7	3,6	2,8	2,2	1,0	31,4	21,9	58,0	49,9
1986	0,6	0,6	3,6	2,8	2,7	1,0	31,2	21,8	57,9	49,4
1987	0,4	0,6	4,4	2,7	2,9	0,8	32,2	21,7	59,4	48,8
1988	0,5	0,7	4,1	2,5	2,2	0,9	31,7	21,2	57,6	47,9
1989	0,6	0,8	3,5	2,4	1,7	0,9	30,3	20,8	54,8	47,3
1990	0,8	1,1	3,1	2,3	1,5	1,0	31,0	21,3	55,0	48,3
1991	1,1	0,8	3,3	2,4	1,0	0,9	31,8	21,9	55,6	49,6
1992	1,2	0,8	3,2	2,3	0,9	0,5	32,3	22,8	56,3	50,9
1993	1,3	0,9	3,0	2,4	0,9	1,0	32,6	23,9	56,8	52,6
1994	1,4	0,9	2,6	2,3	0,8	0,8	31,7	23,7	55,2	51,6
1995	1,4	1,0	1,8	2,3	0,8	0,6	29,8	23,4	52,9	50,8

EUR 12 = EUR 15 excluding GR, P and L; 1991-95 including D.

1994 and 1995: Commission services forecasts spring 1995.

Source: Commission services.



**Table 12****Government receipts by category as a % of GDP**

	Total		Direct taxes		Indirect taxes		Social security contributions		Other current receipts	
	NL	EUR 12	NL	EUR 12	NL	EUR 12	NL	EUR 12	NL	EUR 12
1970	42,3	37,3	13,4	10,2	11,4	13,5	14,0	10,7	3,3	2,9
1971	44,1	37,6	14,3	10,4	11,6	13,3	14,8	11,1	3,2	2,9
1972	45,2	37,5	14,8	10,2	11,9	13,1	15,0	11,4	3,3	2,8
1973	46,7	38,1	15,0	10,6	11,7	12,9	16,3	11,9	3,4	2,8
1974	47,7	39,0	15,4	11,3	10,9	12,4	17,2	12,3	3,9	3,0
1975	50,1	39,9	16,1	11,3	11,2	12,3	17,7	13,3	4,9	3,1
1976	50,5	41,3	15,7	11,8	11,7	12,5	17,3	13,8	5,7	3,2
1977	51,3	41,8	15,6	12,1	12,4	12,7	17,3	14,0	5,9	3,1
1978	51,6	41,8	15,7	12,0	12,7	12,7	17,5	14,0	5,6	3,1
1979	52,4	42,0	15,7	11,7	12,4	12,9	18,0	14,1	6,0	3,2
1980	54,0	43,0	16,3	12,1	12,4	13,1	18,4	14,3	6,8	3,5
1981	54,6	43,9	15,5	12,3	12,0	13,2	19,0	14,4	8,1	3,9
1982	54,9	44,5	15,1	12,5	11,8	13,3	19,9	14,8	8,1	4,0
1983	56,2	45,0	13,9	12,6	12,1	13,4	22,1	15,1	8,0	3,9
1984	54,9	45,1	13,1	12,8	12,2	13,5	21,0	15,0	8,6	3,8
1985	54,4	45,4	12,7	12,9	12,1	13,4	20,5	15,0	9,0	4,1
1986	52,8	45,1	13,4	12,7	12,6	13,4	19,6	15,1	7,1	3,9
1987	53,5	45,2	14,1	13,0	13,3	13,6	20,5	15,1	5,6	3,5
1988	53,0	44,6	14,4	12,9	13,2	13,6	20,5	14,9	4,8	3,3
1989	50,1	44,9	13,9	13,3	12,5	13,4	18,8	14,7	4,8	3,4
1990	49,9	44,7	15,5	13,0	12,3	13,4	17,0	14,8	5,0	3,5
1991	52,7	45,1	16,9	13,0	12,4	13,5	18,0	15,2	5,3	3,5
1992	52,4	45,6	15,9	12,9	12,8	13,4	18,6	15,6	5,0	3,7
1993	53,5	46,2	16,9	12,9	13,0	13,6	18,7	16,0	4,9	3,7
1994	52,1	46,0	14,2	12,5	13,1	13,8	20,4	16,1	4,4	3,5
1995	49,6	46,2	13,5	12,9	13,0	13,9	19,4	16,1	3,7	3,4

EUR 12: EUR 15 excluding GR, P and L; 1991-95 including D.

1994 and 1995: Commission services forecasts spring 1995.

Source: Commission services.

**Table 13****Government net borrowing (–) or net lending (+) and gross debt (as a % of GDP)**

	Including interest payments		Excluding interest payments		Gross debt	
	NL	EUR 12	NL	EUR 12	NL	EUR 15
1970	–1,2	0,4	1,7	2,2	:	:
1971	–1,0	–0,2	1,9	1,6	:	:
1972	–0,4	–1,1	2,3	0,6	:	:
1973	0,8	–0,6	3,5	1,1	:	:
1974	–0,2	–1,6	2,7	0,4	:	:
1975	–2,9	–4,3	0,2	–2,1	42,4	:
1976	–2,6	–2,9	0,4	–0,7	42,0	:
1977	–1,8	–2,5	1,2	–0,1	41,4	:
1978	–2,8	–3,4	0,3	–0,8	42,6	:
1979	–3,7	–3,2	–0,5	–0,5	44,7	:
1980	–4,0	–3,4	–0,3	–0,4	47,6	:
1981	–5,5	–4,9	–1,0	–1,2	51,7	:
1982	–7,1	–5,1	–1,9	–1,0	57,1	:
1983	–6,4	–4,8	–0,7	–0,5	63,7	:
1984	–6,3	–4,6	–0,3	0,0	67,8	:
1985	–3,6	–4,4	2,7	0,5	71,5	:
1986	–5,1	–4,1	1,3	0,7	73,5	:
1987	–5,9	–3,5	0,5	1,1	76,1	:
1988	–4,6	–3,1	1,7	1,4	79,2	:
1989	–4,7	–2,2	1,2	2,4	79,2	:
1990	–5,1	–3,4	0,9	1,3	78,8	:
1991	–2,9	–4,2	3,3	0,6	78,9	56,0
1992	–3,9	–5,1	2,4	0,1	79,9	60,3
1993	–3,3	–6,2	3,1	–0,8	81,4	66,2
1994	–3,1	–5,4	3,0	–0,2	78,1	68,0
1995	–3,2	–4,4	2,6	0,9	78,1	70,3

EUR 12: EUR 15 excluding GR, P and L; 1991–95 including D.

1994 and 1995: Commission services forecasts spring 1995.

Source: Commission services.





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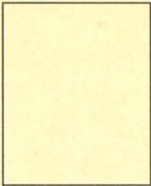
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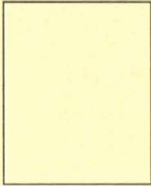
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